

CHAPTER-I

INTRODUCTION

“Shape the future of life

Healthy environments for children

The children of today are the adults of tomorrow

They deserve to inherit a safer, fairer and healthier world

There is no task more important than safe guarding their environment”

Safety begins at home. Right from the birth, human beings develop a sense of safety to protect themselves from the environment. Safety is not only necessary for the individual but also for the society on the whole. Road traffic safety means to safety drive on road to ensure that there is no harm or the driver of the vehicle do not cause any harm to any other vehicle moving near by it. In other words we can say that road traffic safety means to reduce accident causes on road for proper driving.

Road traffic accidents are one of the main causes of death and injury to children of school age. Accidents tragically are often due to ignorance, carelessness, thoughtlessness and over confidence. The consequences of accidents affect seriously the children’s health and growth, interferes in their study and future.

Accidents are one of the five leading causes of death in industrialized and developing countries. Injuries arising from accidents are an increasing public health problem. Yearly, 10% of children suffer an accident for which it is necessary to contact the health services.

Children, being less aware of danger, are one of the most vulnerable groups. Younger children are more vulnerable indoors, while older ones are more at risk outdoors. There appear to be "gender types" of accidents; males tend to have more accidents outdoors while females tend to have accidents indoors. Accidents are also related to the prevailing socioeconomic and cultural conditions.

Productivity lost from a childhood injury is for a far longer period of time than for adults; it might be even for life. In case of disability an adult can be rehabilitated but for a child the compensation is often more difficult, although for many kinds of trauma, children heal more quickly than adults. Potential years of life lost as a result of accidents before 65 years for some industrialized countries range between 38% and 59% of the total potential years of life lost for people aged 1-24 years and in some developing countries between 4% and 47%.

Road safety signals which will help in reducing existing high accident rate prevalent in developing countries in India. Bicycle were being driven mostly 62% of school children respectively. Some of children started driving under the age of 10 year and females out number males at this age. Driving at such a young age, hence putting their lives and also others life in danger is of course the result of laxity on the part of parents.

The WHO 2004 focused on the rapidly growing public health problem of accidents. The “**Road Safety is no accident**” is a message to the public that the solution to this grave problem lies in their own hands. Action can be taken on a number of fronts to prevent these needless deaths and disabilities, and the immense loss and suffering they cause.

The theme for **World Health Day 2004** was “**Start Road Safety Early**”. On this day around the globe, hundreds of organizations hosted events to help and raise awareness about road traffic injuries, their grave consequences and enormous costs to society. They also contributed to spreading the word that such injuries can be prevented.

In worldwide Every year more than 1.17 million people die in road crashes around the world. The majority of these deaths, about 70 % occur in developing countries, 65 percent of death involves pedestrians and 35 % of pedestrian death in children. Over 10 million are crippled or injured each year. It has been estimated that at least 6 million more will die and 60 million will be injured during the next 10 years in developing countries unless urgent action is taken. The vast majority of these occur in developing countries among pedestrians, cyclists, motorcyclists and users of public transport.

A report published by the **world health organization** in 2004 estimated that some 1.2m people were killed and some injured on the roads around the world each year and was the leading cause of death among children 10-19 years of age. The report also noted that the problem was most severe in developing countries and that simple prevention measures could halve the number of deaths. Among children ages 14 and under more than 80% of

bicycles related fatalities are associated with the bicyclist's behavior. The most common crashes including riding into a street without stopping; turning left or severing into traffic that is coming from behind, running a stop sign, an riding against the flow of traffic. More than 40% of all head injury –related deaths and approximately three growths of head injuries occurs among children ages 14 and under. Younger children suffer a higher proportion of head injuries than older children.

According to WHO, an accident is an event, independent of human will, caused by an outside force acting rapidly and resulting in physical or mental injury. Road accident involving children has become a major cause for concern around the world. Within, there has been a dramatic increase in the number of road accident involving children. Road safety is there for of key importance in terms of keeping children safe from the traffic.

Middle school students are experiencing dramatic changes in physical development, although the rate at which this development occurs varies individually. They are particularly concerned about peer approval and acceptance, and they need close friends their own age that can provide the comfort and understanding they find hard to get from adults. They are usually excitable, easily motivated, creative, inquisitive, and eager to explore; but if not active participants in learning situations, they may easily drift into daydreams. Many of them find it difficult to cope with the many changes taking place in them and compare themselves unfavorably to their peers. At the same time, they are often concerned about their ability to learn and whether or not they can meet the expectations of parents and other adults.

The most common causes of road accidents **are** Speeding, Careless crossing the road, Drink Driving, Not Wearing Seat Belt , Careless Driving aggressive driving, Inexperience, Failed to Look Properly, Loss of Control, Failed to Judge Other Person's Path/Speed .

As adults, we are responsible for young children's safety around traffic whether they are pedestrians or passengers. "The aim of road safety is convey information to road users so as to enhance their knowledge about road safety issues, influence their behavior on the road and / or prepare them for new safety measures."

NEED FOR THE STUDY

“Children are the future of the nation. If given proper training they could help usher in an era of traffic culture.”

- Dr. P.S. Passich

Globally road traffic injuries are the leading cause of death among young people aged 15-19 years and second leading cause among 5-14 year olds. The UN General Assembly has declared 2011 to 2020 as the "**Decade of Action for Road Safety**" which seeks to halt the increasing trends in road traffic deaths and injuries worldwide. The starting point for any interventions aimed at achieving the UN declaration especially with regard to young people would be to first know their understanding and behavior patterns with respect to road safety.

According to **World Health Organization**, worldwide accident and prevalence rate nearly 1.18 million people lost their lives every year due to road accidents. Almost 18000 young people are injured in Australia roads every year. In Australia, 958 persons killed in the year of 2001, 958 persons killed in the year of 2002, and 931 persons killed in the year of 2003.

Each year in US approximately 850 children under the age of 15 years are killed & another 30,000 are injured in pedestrian collisions. During last decades injuries due to Roadside Accident have risen by 300% in Asian and African countries in contrast to 30-40% in developed countries. There is limited literature available regarding accident related behavior in developing countries.

Globally according to WHO estimates, RSA is the 9th leading cause of death as per on the basis of Daly It has been estimated that 1 million deaths & 15 million RSA (Road Side Accidents) occur on roads worldwide every year. 75% of RSA occur in the so called developing countries, even though these countries account for only 32% of total motor vehicle fleet, which involves 65% of pedestrians and 35% of school children. Child pedestrian injury, an important cause of morbidity and mortality remains one of the leading causes of death in developed and developing countries. The chances of RSA can be averted to a large extent, if school children who are going to be adults of tomorrow are made aware of road safety measures. Hence present study was focused on school children to study knowledge of various risk factors pertaining to road side accidents and their practices.

India has the second largest road network in the world with over 3 million km of roads of which 46% are paved. These roads carry an estimated 60% of freight and 80% of passengers and they make a vital contribution to India's economy. The road traffic contains an incredible mix of pedestrians, animal drawn vehicles, bicycles, motorcycles, cars, buses and trucks. On the whole the facilities for the large number of non-motorized road users are poor and the 40 million vehicles using the roads have a terrible toll on human life, killing over 80,000 people with over one third of a million victims requiring hospital treatment. These crashes not only cause considerable suffering and hardship but they also have a major impact on the country's economy, costing an estimated Rs 300 billion or more than 3% of India's GDP every year.

According to **WHO Road Accident death rate** is fifteen children under the age of 15 lost their lives and 1079 were injured in Norwegian Traffic in 2002, and increase of 8 children killed and 122 children injured compared 2001. The number of road accidents registered during the year of 2007 was 20,519 against 20,242 in the preceding year. Among these accidents majority 18,329 were non-injury, 133 fatal, 403 caused serious injury and 1,654 slight injuries compared to 2006 accidents causing casualties went up by 12.5% , non-injury by 0.2% , fatal by 0.9%, serious injury by 36% and slight injuries by 8.2%.

In 2006, fifty three persons killed (45– 54 years) in road traffic accidents. April 19th, 2007, GENEVA- road traffic crashes were the leading cause of death among young people between ten and twenty four years, according to an new report published by World Health Organization as part of the first United National Global road safety week 23 – 29 April 2007.

Accidents are one of the five leading causes of death in industrialized and developing countries. Injuries arising from accidents are an increasing public health problem. Yearly, 10% of children suffer an accident for which it is necessary to contact the health services.

VAN OSS T et.al (2013 Study findings revealed that there is significance in the effectiveness of pedestrian road traffic safety education. The study finding concludes that Road safety education program will improve the children knowledge.

LACHAPELLE U et.al (2013) conducted the experimental study to evaluate the effectiveness of bicycle education programs to reduce bicycle crashes among 600 school children in India. The study finding revealed that school based programmed recorded improvement in test details.

PUVANACHANDRA P et.al (2012) conducted the Randomized control trial to determine the effectiveness of road safety education among 500 school children in Delhi. The teaching program contains 4 heading like road traffic injuries among children in Delhi, prevention of cycling injuries, how to cross the road, the role of Road safety education, factors involving for road traffic accidents, The study finding revealed that there was a significant improvement knowledge level about road safety measures in school children. No significant adverse effects were reported.

Now - a-days only a few children walk to school compared to previous generation. This is because parents feel safe to drive their children to school resulting in poor road crossing skills among children. Hence, children should be given awareness regarding road safety. There is less number of research studies done on knowledge of primary school children regarding road safety measures.

By watching school children after their school timings, walking as they like, getting shouting by vehicle drivers, passers-by, vendors, house-wives, the researcher felt the need to educate the children regarding road safety measures. If the children are educated regarding causes and prevention of road traffic accidents, rules and regulations for crossing the roads and signal lights, such type of accidents can be reduced to an extent. The purpose this study is

assessing the existing level of knowledge of primary school children regarding road safety measures and providing structured teaching program regarding road safety measures.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of video assisted teaching on level of knowledge regarding road safety measures among middle school children in selected schools at kanchipuram.

Objectives

- ❖ To assess the Pre and post test level of knowledge on road safety measures among middle school children in experimental group and control group.
- ❖ To assess the effectiveness of video assisted teaching on Road safety measures among experimental group, control group
- ❖ To find out the association between socio demographic variables and the level of knowledge regarding road safety measures among experimental group.

HYPOTHESIS

- ❖ H1: There is a significance difference between pre test the level of knowledge children regarding road safety measures among middle school in experimental group and control group.
- ❖ H2 : There is a significance between post test level of knowledge on road safety measures among middle school children in experimental and control group.

- ❖ **H3:** There is a significant association between the post test levels of knowledge regarding road safety measures with their selected demographic variables among the middle school children in experimental group.

OPERATIONAL DEFINITION

- ❖ **ASSESS:** In this study it refers to collection of data that helps in determining the extent and nature of knowledge for middle school children.
- ❖ **EFFECTIVENESS:** In this study effectiveness refers to the desired level of knowledge gained by the middle school children after video assisted teaching program.
- ❖ **VIDEO ASSISTED TEACHING PROGRAMME:** It is a planed teaching given to school children regarding road safety measures such as causes of accident, prevalence and rules and regulation for crossing the road, signal light, zebra crossing by using video assisted teaching program.
- ❖ **KNOWLEDGE:** It refers to response of the Middle school children regarding road safety measures using self structured questionnaire.
- ❖ **ROAD SAFETY MEASURES:** Road safety refers to methods and measures that are issued to reduce the risks of injury, death and harm to middle school children, passengers and pedestrians.

ASSUMPTION

The study assumes that

- ❖ Middle school children may have little or inadequate knowledge regarding road safety measures that differs from child to child.
- ❖ Video assisted teaching program influence the level of knowledge among Middle school children regarding road safety measures.
- ❖ Socio demographic variables contribute to the level of knowledge of Middle school children regarding road safety measures.

DELIMITATION

- Setting of the study was delimited CSI Middle school Big Kanchipuram, CSI Middle school central kanchipuram
- The school student aged 11-13 years

CONCEPTUAL FRAME WORK

According to **Polit and Hungler** “A framework is the abstract logical structure of meaning that guides the development of the study and enables the researcher to link the finding to nursing body of knowledge”

A conceptual framework is a concept, which is a mental image of the phenomenon. This concept are linked each other to express the relationship between them. It will guide the researchers to know what data has to be collected and give direction to the whole research process.

The conceptual framework for the present study is based on Ludwig von Bertalanffy’s modified general system theory model.

Input

Input is defined as stimuli which can come from the environment or from within a person. In this study, input is defined as assessment of the demographic variables and assessment of pretest level of knowledge among middle school children with structure questionnaire.

Throughput

In this study, throughput refers to the administration of video assisted teaching regarding road safety measures among middle school children.

Out put

In the present study of effectiveness of video assisted teaching program on road safety measures among middle school children. This is achieved through comparison between the pre-test and post-test knowledge score of the subjects. The increased post test score is an indication of the effectiveness of video assisted program.

Feed back

It is the process that enables a system to regulate itself. Accordingly a higher knowledge score obtained by the post test score will indicate that video assisted program is effective. A low score in post test indicates the need for repeating /modifying the video teaching program.

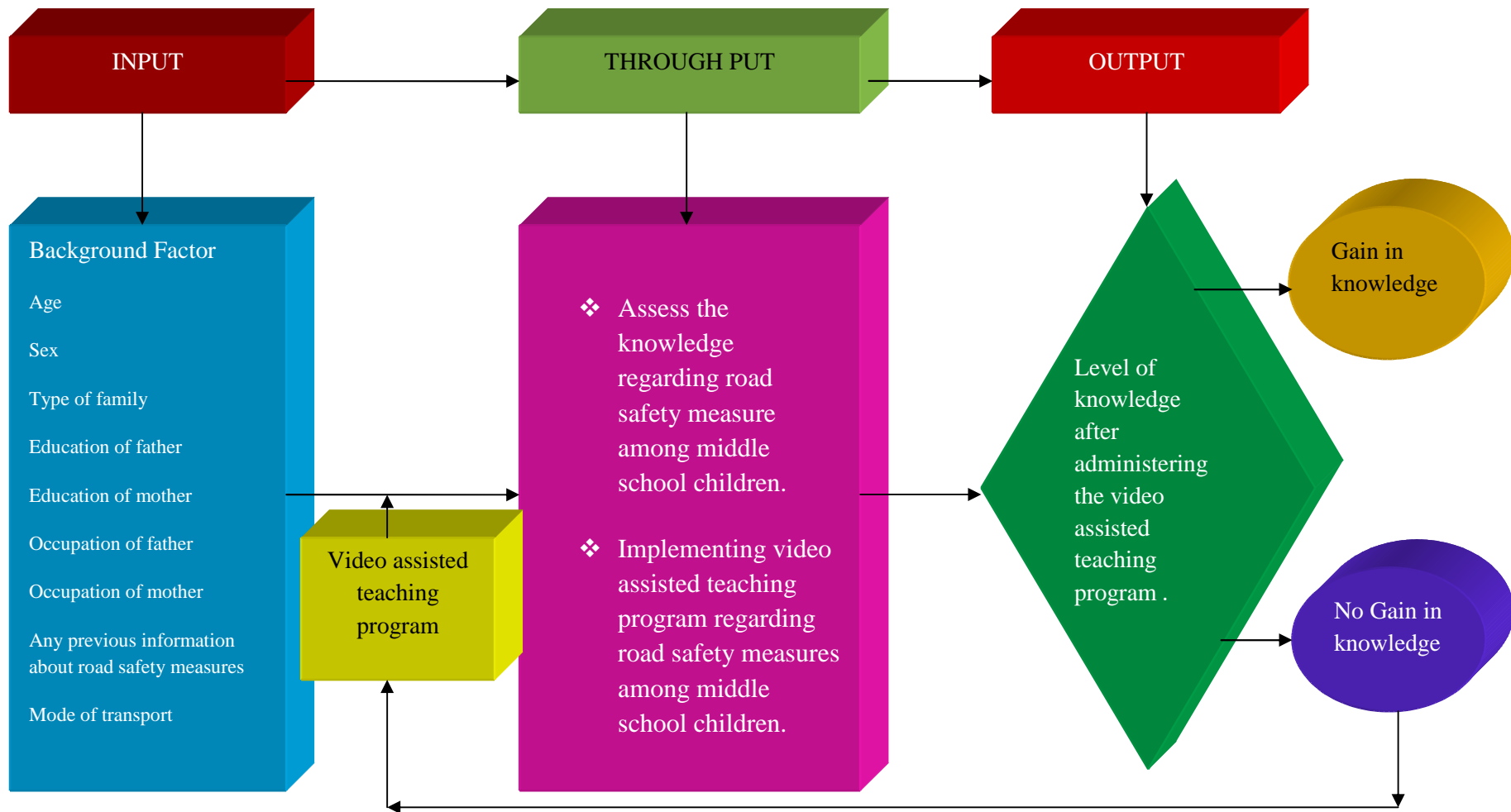


Fig 1 : Conceptual framework (Ludwing von bertalanffy's modified general style model)

CHAPTER-II

REVIEW OF LITERATURE

According to **BT Bsavanthappa** the review of literature is defined as a broad, comprehensive, in depth. Systematic and critical review of scholarly publications, unpublished scholarly print materials, audio visual materials and personal communication.

The term review of literature refers to the activities involved in identifying and searching for information of the state of knowledge of the topic. This term is also used to designate a written summary of the state of the art on a research problem. The investigator carried out extensive review of literature on the research topic in order to gain deeper insight into the problem as well as to collect maximum relevant information for building up the study.

The Review of literature in the present study is organized as follows:

1. Studies related to incidence and prevalence of Road traffic Accidents.
2. Studies related to Road safety and teaching and awareness of road traffic accidents

1.STUDIES RELATED TO INCIDENCE AND PREVALENCE OF ROAD TRAFFIC ACCIDENTS.

WANG J T et.al (2009) conducted a Observational study to determine Characteristics of bi-cycle related head injuries among 324 patients with bicycle-related injuries in Taiwan. Basic patient information &bicycle related head injuries were collected from the trauma data Registry in 5 Hospital.

Telephone interview were conducted to collect specific information surrounding bicycle accidents. The study findings Revealed that bicycle related head injuries, 90 (27.8%) had severe head injuries. Boys than girls had a higher proportion of severe head injuries (34.1% vs 23.4% ; $p= 0.048$).children aged 5 to 9 years had a higher proportion of severe head injuries compared with ages 10 to 14 years (65.2% vs 6.4% ; $P=0.043$).Bicycles without reflections had a higher proportion of severe head injuries compared to bicycles with reflectors(69.0% vs 5.7% ; $P=0.004$). The Study finding concludes that Children whose main mode of transport is bicycles cause 27.8% injuries, the enforcement of Helmet legislation, Educational programs in bicycle safety and equipment to prevent bicycle accident.

LI Y C et.al (2008) conducted a case control study to determine risk factors on road safety accidents among 116 middle school students in China. Students were served as controls that were from the same class of the cases and matched by age, sex, information on personal behavior, family conditions and knowledge, attitude, practice on road traffic of these children collected and compared. Conditional logistic regression was conducted to analyze the relationship between these factors and RTAs. The study finding Revealed that compared to the controls, the cases showed more negative attitude and risk taking behaviors especially in riding bicycle. However knowledge on road safety showed less significant differences between case and control group. The study finding concludes that Road safety attitude and behavior distance from home to school were the main influence factors for RTAs among middle school students. it seemed more important in improving the attitude and behavior on road safety than to enhance the knowledge for prevention and control of RTAs among middle school students.

NAKITTO M T et.al (2008) Conducted a cohort study to determine the overall risk of pedestrian traffic injury among 8,165 school children in Uganda. 35 primary schools selected followed for 3 terms. injuries were recorded by teachers using a questionnaire Data collected includes Id, school, age, grade, gender, incident date, vehicle type, and injury outcome. Demographic characteristics are described and cumulative incidences calculated. The study finding revealed that 49% were male from 35 primary schools. The mean age was 9 years (sd: 2.78) of the 35 schools, 92% were day. The others mixed day and boarding. were involved in a traffic incident. 25% of the injuries reported were serious and warranted care in a health facility. No death occurred. 40% of incidents involved commercial motorcycles, 41% bicycles, 9% cars, 8% taxis and 2% trucks. The cumulative incidence was 0.168% each term over the 3 terms of the year the cumulative incidence was 0.5 \pm 0.02. there were no gender differences in the cumulative incidence.

CHRISTIE N et.al (2007) Conducted a Qualitative study to determine the overall high traffic injury risks for children among parents of children aged 9-14 years living in low socio economic areas. The study was conducted in 10 low socio economic English districts that also have high rates of child pedestrian injury. the study finding revealed that parents believe that children play in their local streets for the following reason they like playing out with friends near home there are few safe ,secure, and well maintained public spaces for children. For children that play in the street the key sources of risk identified by parents were illegal riding and driving around estates and during on the pavements, the speed and volume of traffic, illegal parking, and children risk taking behavior. The study finding concluded that intervention programs need to take into account in multiple reasons why children in low socioeconomic areas become exposed to hazardous environments thereby increase risk of injury. The communities are increasable needed to implement

traditional road safety approaches such as education, engineering and enforcement and provide safe and accessible public space, affordable activities for children, and greater support for parents.

KWEON S S et.al (2005) conducted a cross sectional study to describe the epidemiological characteristics of child pedestrian traffic injuries one metropolitan city and its school zones and to determine the factors associated with those accidents among 116 children aged between 6 and 15 years in Seonam. A direct survey of the environmental factors within the school zones in study area (n=116) was performed. Self administered Questionnaires, via mail and telephone surveys were used to assess the safety education programe.the school were divided into two groups according to the occurrence of pedestrian traffic injuries in their school zones. The study finding revealed that pedestrian injuries were found to account for 3.2% of all traffic injuries in the subject area. The epidemiological characteristics were not significantly different between genders. There were some significant risk factors within the environment factors such as local road 95%,heavy traffic volume 95%,poor visibility routes from cars 95%,and barriers on the pedestrian routes 95%.only one factor of education in a safety park was significantly associated in the traffic and pedestrian safety education factors. The study concluded that significant association with pedestrian injury risk was identified in some of the modifiable environmental factors than in the educational factors.

YAO Y S et.al (2003) conducted a case control study to determine the risk factors of injuries among 508 middle school children in china.254 children In interventional group 254 in control group on the basis of sex, age, and grade. The relationship between risk factors and injuries were analyzed by conditional univariate and multivariate logistic regression. the study finding found that

seven risk factors responsible for the incidence of injury were identified follows high risk behaviors, negligence of defenses, scramble, father being illiterate, risky environment around their houses, extrovert temperament and mother being illiterate .we also distinguished 5 productive factors as follows as harmonic students were more knowledgeable and having positive attitude towards road traffic (OR=0.5340) and had high economy level. The study concluded that the injuries in middle school students were caused by multiple factors, injury prevention and control program should focus on certain strategies such as education and supervision of environment hazards.

2.STUDIES RELATED TO ROAD SAFETY AND TEACHING AND AWARENESS OF ROAD TRAFFIC ACCIDENTS.

VAN OSS T et.al (2013) conducted the experimental study to determine the effectiveness of pedestrian and road traffic safety education among 200 school children in India. The sample selected by Simple random method the pre test post test conducted by demographic data and structured questionnaires .Road safety Education program done by structured teaching method. The study finding revealed that there is significance the effectiveness of pedestrian road traffic safety Education. The study finding concludes that Road safety education program will improve the children knowledge.

LACHAPELLE U et.al (2013) conducted the experimental study to evaluate the effectiveness of bicycle education programs to reduce bicycle crashes among 600 school children in India. the sample selected by simple random method.300 students in experimental group,300 control group, Tests administered before and after training were designed to assess knowledge acquired during the training, questions assessed children's existing knowledge

of helmet use and other equipment, bi-cycle safety as well as their ability to discriminate hazards and understand rules of the road. Response to individual questions overall pre and post test training scores, and change in test scores were compared using comparison of proportion-test and ordinary least squares regression. The study finding revealed that school based programmed recorded improvement in test details.

PFEFFER K et.al (2013) conducted experimental study to examine the effect of peer influence on the pedestrian road crossing decisions among 80 adolescents (16-18 years) in UK. Participants were assigned to one of 4 experimental conditions: negative peer (influencing unsafe decisions) positive peer (influencing cautious decisions), silent peer (who observed but did not comment), and no peer (the participant completed the task alone) given 10 videos regarding pedestrian crossing in the experimental group. The study finding revealed that statistically significant difference was found between peer conditions. Participants least often identified safe road crossing site when accompanied by a negative peer and more frequently identified dangerous road crossing sites when accompanied by a positive peer, both caution and unsafe comments from a peer influenced adolescent pedestrian's decisions. The study finding concluded that road crossing decisions of adolescents were influenced by both unsafe and cautious comments from their peers. The decisions highlighted the role that peers can play in both increasing and reducing adolescent risk taking.

PUVANACHANDRA P et.al (2012) conducted the Randomized control trial to determine the effectiveness of road safety education among 500 school children in Delhi. The teaching program contains 4 heading like road traffic injuries among children in Delhi, prevention of cycling injuries, how to

cross the road, the role of Road safety education, factors involving for road traffic accidents, the sample divided by two groups 250 interventional group 250 control group by random selection. The study finding revealed that there was a significant improvement in knowledge level about road safety measures among school children. No significant adverse effects were reported.

YU.J et.al (2012) conducted a cross sectional study to determine the Childhood road safety behaviors among 7034 children in China. A stratified cluster sample of 7034 children from pediatric clinics (816 children aged 0-2 years who are receiving vaccines), kindergartens (1148 children aged 3-5 years), primary schools (2410 children aged 6-11 years), and secondary schools (2660 children aged 12-17 years) was collected by self-reported questionnaire surveys. The respondents were instructed to respond to each behavior question, using response choices scoring from 0 to 3. An 18-item-weighted road safety Behavior Index (RSBI) which including 5 items for walking, 7 items for cycling, 2 items for public transport, and 4 items for private motor vehicles. Study Result revealed that from statistical analysis indicate that the effects of children's sociodemographic characteristics on the RSBI differ greatly concerning each particular travel category; and RSBI are associated more with child-related characteristics than with parent-related characteristics as the age of the children's group increases. The study concludes with some recommendations for preventing the increasing toll of road traffic injury among Chinese children, which include educational efforts to increase knowledge of road safety and reduce traffic risk behaviors for children and their parents; creating a safe and convenient environment for walking, cycling, and public transport travelers; and promoting legislation and enforcement such as the mandatory usage of bicycle helmets and child passenger restraints.

GAD A et.al (2011) conducted an experimental study to assess the effectiveness of a Video teaching program on road safety measures among 1000 middle school children in Gujarat. Samples were selected by simple random method. The study using a pre test-post test design the post test score knowledge was recorded by Structured Questionnaires. The study finding revealed that Knowledge increased significantly following the intervention.

JIN H Q et.al (2009) conducted Quasi Experimental study to evaluate the effectiveness of education regarding road safety among 300 middle school children in Chinese. The goal of this study was prevention of road traffic accidents among middle school students through understanding their knowledge, attitude and practice on road safety. Students are divided in grade 1 grade 2 from 7 juniors and seniors middle school in China. Education was provided to the intervention group and all the middle school children. The study finding revealed that the mean scores of road safety knowledge for intervention group improved significantly during the follow up period (from 0.9-3.8), While these indices did not change much in the control group (from 0-0.2). Negative attitude on road safety was found in both groups, but less in intervention group. The study finding concludes that program on road safety education significantly improved the relative knowledge for middle school children and its exerted positive effects in road safety attitude to some extent. Education on road safety should be carried out in the early stage of childhood with newer and more effective intervention approaches.

OXLEY J et.al (2008) Conducted Randomized Controlled trial teaching young children to cross road safety To evaluate the effectiveness of education about road safety among young children in Australia. The study finding Revealed that Significant reductions in proportion of critically incorrect road

crossing responses were found immediately after training 56% and one month post training 47% by the case group compared with pre training response, and relative to any changes in responses of control group. The beneficial effects were greater for younger children, females, children with less well developed perceptual attention and cognitive skills, and those with little traffic exposure.

SNOWDON et.al (2008) conducted experimental study to assess the effectiveness of a multimedia intervention on parents Knowledge and use of vehicle Safety system among 418 families in Canada. a multisite intervention study using a pre test-post test design was conducted to test the effectiveness of an educational program on parents. Knowledge of safety system use for children (0-12 years) for 6 weeks following the educational intervention. The study finding revealed that Knowledge increased significantly following the intervention.

CHARLTON et.al (2008) conducted an experimental study to evaluate the efficacy of Road safety measures program among 200 school children in Nepal. Sample selected by simple random method. 200 students in experimental group, pre test post test are done Before and after training with a questionnaires , questions assessed children's knowledge of helmet, pavement walking, crossing the road, bi-cycle safety, the study finding revealed that there is a significance difference in post test level of knowledge among school children. The study finding revealed that school based programmed recorded improve student knowledge.

HUSSEIN et.al (2006) conducted an experimental study to determine the effectiveness of road safety knowledge among 300 primary school children in Rajasthan. Children within the age group 5-12 years old participated in this study drawn from five different primary schools within an educational district of Rajasthan. Study subjects are divided into experimental groups control group. Experimental group one received road safety education through a three dimensional model of the traffic environment .the study finding revealed that experimental group showed the interventions are effective in increasing children's knowledge about the safe and dangerous locations at which to cross the street. Control group showed that increased knowledge did not result in improved. The study conclude that three dimensional model of the traffic environment is effective for middle school children.

THEIN et.al (2002) conducted an Randomized control trial to assess the effectiveness of multimedia intervention of pedestrian road crossing among 700 middle school children in Haryana. the experimental group receive multimedia intervention of pedestrian road crossing, control group not receiving any intervention. The level of score is measured by Questionnaires the score like 30% inadequate knowledge.31%-75% moderately adequate knowledge 75%-100% adequate knowledge.post test score measured by 7 days after the intervention. The study finding revealed that there is the significance improvement of knowledge after the multimedia intervention.

SPRY L.et.al (2002) conducted a observational study to assess the children's behavior in simulated realistic traffic situations among 56 children (5-6 years) in UK. Children's performance was videotaped and coded for relevant behaviors such as stopping at the kerb, looking for traffic, direction of gaze, and style of crossing (i.e. walking vs. running) Consideration of individual performance revealed the existence of individual differences within

the sample. The study Results revealed that performance was extremely poor. 60% of the children failed to stop before proceeding from the herb onto the road. Looking for oncoming traffic was exhibited by no more than 41% of the sample, dropping to as low as 7% in some instances. When looking did occur, it was initially as likely to be in the inappropriate direction (i.e. to the left) as in the appropriate direction (i.e. to the right).the study finding concluded that the children need more knowledge regarding road safety like look, lesion and go These findings, based on controlled naturalistic tasks and detailed observational methods, build on earlier studies that are generally able to provide only estimated rates of children's behavior.

ZEEDYK M S et.al (2001) conducted an experimental study to determine the effectiveness of road safety knowledge among 120 primary school children in Scotland. Children within the age group 4-5 years old participated in this study drawn from three different primary schools within an educational district of Scotland. Study subjects are divided into 2 experimental groups. Experimental group one received a three dimensional model of the traffic environment, a road safety board game, illustrated posters and flip chart materials. Experimental group two received real life traffic environment. The study finding revealed that experimental group showed all three interventions are effective in increasing children's knowledge about the safe and dangerous locations at which to cross the street. Experimental group two showed that increased knowledge did not result in improved traffic behavior.

CHAPTER-III

METHODOLOGY

Methodology is the significant part in the study which enables the investigator to project a blue print of the research undertaken. Research methodology is the systemic way to solve the research problems. The research methodology involved the systemic procedure by which the investigator starts from the initial identification of the problem to its final conclusion.

This chapter deals with research design, setting, population, sample and sample size, sampling technique ,sample selection criteria, description of the tool, scoring, validity of the tool, reliability of the tool, pilot study, data collection procedure, plan of data analysis and ethical consideration.

RESEARCH APPROACH

Evaluative research is generally an applied research that involves the findings out of how well a program, practice, and procedure is working. It involves the collection and analysis of information relating to the functioning of the intervention with aim of assessing the effectiveness.

The research approach in this study was a quantitative evaluative approach quasi experimental design in nature used for this study. To be specific pre and post test design with experimental and control group were used to evaluate the effectiveness of video assisted teaching program on Road safety measures among middle school children. The experimental group was similar to control group with regard to age, sex and other selected factors. The experimental group included those middle school children were different from control group only with regard to attending video assisted teaching program.

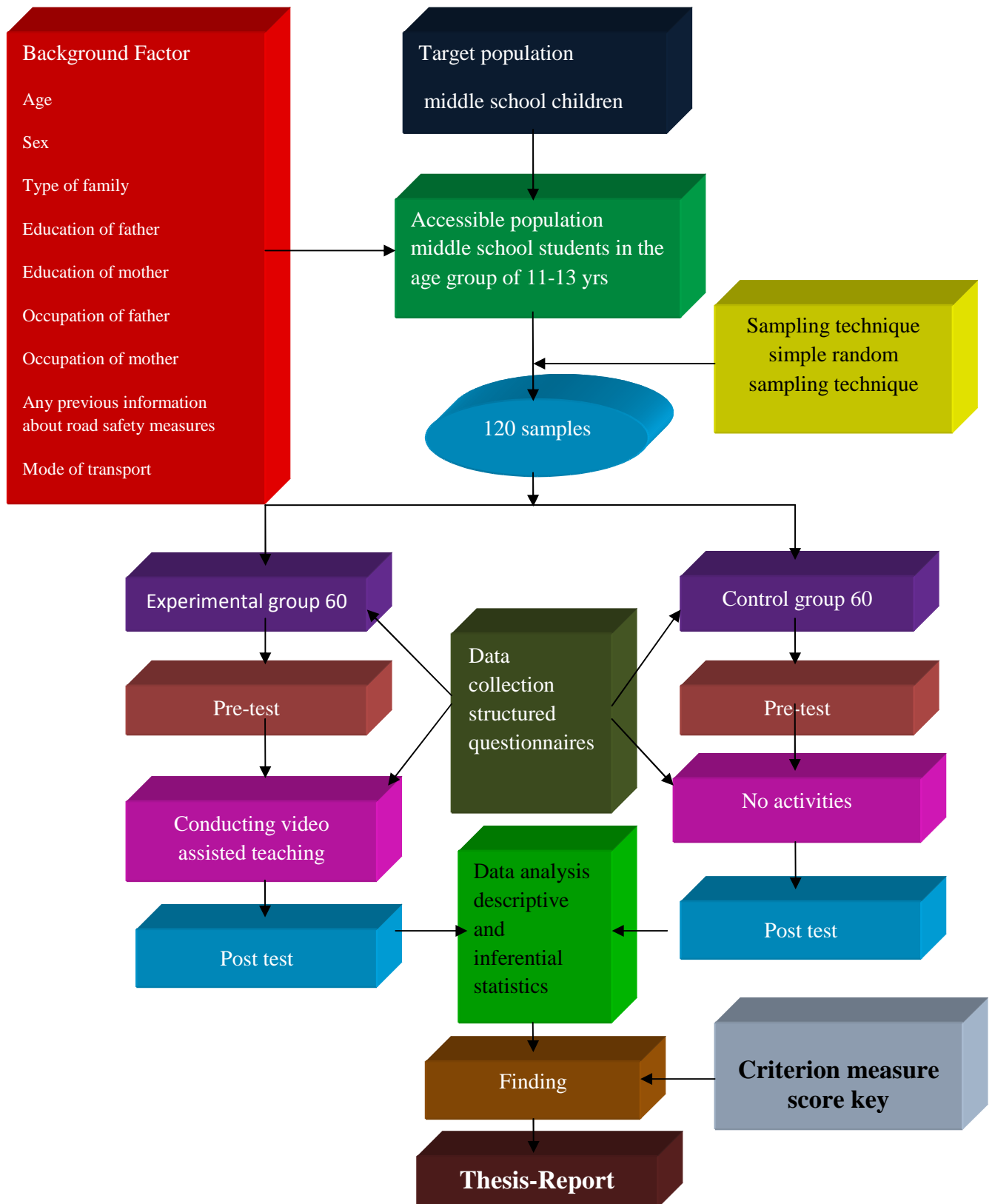
RESEARCH DESIGN

According to **Polit and Hungler** the research design is defined as “The overall plan for collecting and analyzing data, including specification for enhancing the internal and external validity of the study”.

“Research design is a plan, structure and strategy of investigation of answering.”

The research design helps the research in selection of subjects of the study and determines the type of analysis to be used to interpret the data. The selection of research design depends upon the purpose of the study research approach and variables under study.

The research design in this study was a quantitative evaluative approach in quasi experimental design used for this study. To be specific pre and post test design with experimental and control group to evaluate the effectiveness of video assisted teaching program on Road safety measures among middle school children. The control group was similar to experimental group with regard to age, sex, type of the family, and other selected factors. The experimental group included those middle school children were different from control group only with regard to attending video assisted teaching program.



SCHEMATIC REPRESENTATION OF RESEARCH DESIGN

RESEARCH NOTATION:

Group	Pre test	Intervention	Post test
Experimental Group	O1	X	O2
Control Group	O1	-	O2

X = Intervention

O1, O2 = Pre test and post test in experimental group respectively.

O1, O2 = Pre test and Post test in control group respectively.

VARIABLES

According to **Suresh k Sharma** variables defined as Qualities, properties or characteristics of person, things, or situation that change or vary and are manipulated or measured in research.

Variables are qualities, quantities, properties, or characteristics of people, things or situation that change or vary.

The variables in the study were,

INDEPENDENT VARIABLE

According to **Suresh k Sharma** Independent variables is a stimulus or activity that is manipulated or varied by the researcher to create the effect on the dependent variables.

Independent variable:

Video assisted teaching program on Road safety measures.

DEPENDENT VARIABLE:

According to **Suresh k Sharma** It is the outcome or response due to the effect of the independent variables, which researcher wants to predict or explain.

Dependent variable:

Knowledge of Middle school children regarding Road safety measures.

EXTRANEIOUS VARIABLE

According to **Suresh k Sharma** Extraneous variables are the factors which are not the part of the study but may affect the measurement of the study variables. These variables are usually recognized and controlled by researcher.

In the present study it refers to selected variables such as, age, sex, Types of the study, Area of living, Educational of the father, Educational of the Mother, Occupation of the father, Occupation of the Mother, any previous information about road safety measures, Mode of transportation.

SETTING

The selection of setting was done on the basis of feasibility of conducting the study, availability of subjects and cooperation of the authorities. The data was collected from the Middle school children studying in C.S.I Middle school at big kanchipuram. And C.S.I. Middle school at central Kanchipuram.

The selection of setting was done on the basis of feasibility of conducting the study, availability of subjects and cooperation of the authorities. For the study, a selected school, kanchipuram were chosen considering the availability of samples, acquaintance of the investigator with the area and the cooperation from the institution.

POPULATION

Population is the entire set of individuals or subjects having some characteristics selected for a study.

Target population is the entire population in which the researchers are interested and to which they would like to generalize the research findings. In this study, Middle school children were the target population.

Accessible population is the aggregate of cases that confirm to the designed inclusion and exclusion criteria and that are accessible as subjects of the study.

The accessible population selected for this study was middle school children who are studying in C.S.I Middle school at big kanchipuram. And C.S.I. Middle school at central Kanchipuram.

S/N	AGE	EXPERIMENTAL GROUP	CONTROL GROUP
1.	11 years	20	20
2.	12 years	20	20
3.	13 years	20	20

SAMPLE AND SAMPLE SIZE

According to **Manoj kumar yadav** “Sample is the small proportion of population selected by observation and analysis”

In this study, the sample size was arbitrarily decided to be 120 Middle school children in which 60 in experimental group and 60 in controls group.

SAMPLING TECHNIQUE

According to **Manoj Kumar yadav** it means a given number of subjects from a defined population as representative of that population.

Sampling is the process by which a relatively small number of individuals. Objects or events are selected and analyzed in order to find something about the entire population from which it was selected

In this study the sample was selected using Simple random sampling technique method in C.S.I Middle school at big kanchipuram. And C.S.I. Middle school at central Kanchipuram.

SAMPLE SELECTION CRITERIA

The study samples were selected using the following criteria

INCLUSION CRITERIA

- ❖ Both sex from 11-13 years age group
- ❖ Students who are studying in middle school at Kanchipuram

EXCLUSION CRITERIA

- ❖ Students who are physically ill at the time if data collection
- ❖ Students are not willing to participate.

DEVELOPMENT OF TOOL

The investigator developed a structured knowledge questionnaire as tool for present study after exploring all sources of information like extensive library search, internet sources and consultation with experts. The experts were requested to check for the relevance, sequence and clarity of the tool. Modification was done according to expert's opinion and the final tool was developed. The tool was translated into Tamil and again it was retranslated into English, thereby, the language validity was ascertained. In the present study the reliability of the structured questionnaire for experimental group and control group was established by test –retest method, among 10 Middle school children. Reliability coefficient was $r = 0.92$ and the tool were found to be reliable for the study.

DESCRIPTION OF THE TOOL

The tool used for the research study was structured knowledge questionnaire regarding Road safety measures, tool consists of two parts.

SECTION A: Demographic data

SECTION B Questionnaire related to knowledge

SECTION A: The investigator constructed this tool to collect the demographic data of the study subjects and to identify the influence of sample characteristics. Background data of students, consists of 10 questions seeking information on the background data of students. The items included. age, sex, Types of the study, Area of living, Educational of the father, Educational of the Mother, Occupation of the father, Occupation of the Mother, any previous information about road safety measures, Mode of transportation.

SECTION B : Questionnaire related to knowledge

It contains 30 items, each carries 1 mark. The highest possible score is 30. The lowest score for each question is 0.

SCORING PROCEDURE

- Maximum score - 30
- Minimum score - 0

SCORE	PERCENTAGE (%)	LEVEL OF KNOWLEDGE
0 -10	0 - 33%	Inadequate knowledge
11 -20	34 - 69 %	Moderate knowledge
21 -30	70 - 100%	Adequate knowledge

VALIDITY OF THE TOOL

According to **Monaj kumar yadav** “Validity refers to whether a measurement instrument accurately measure what it is supposed to measure”

Three nursing experts validated the tool for its content. The experts were requested to check for the relevance, sequence and clarity of the tool. Modification was done according to expert’s opinion and the final tool was developed. The tool was modified according to expert’s opinion. The items with 100% agreement were included in the tool. A few items were, modified and retained in the tool. The tool was translated into Tamil and again it was retranslated into English, thereby, the language validity was ascertained.

RELIABILITY OF THE TOOL

According to **Talbot** “Reliability is defined as the ability of the instrument to create reproducible result. it is the absence of error in measurement”.

In the present study the reliability of the structured questionnaire for experimental group and control group was established by test –retest method, among 10 Middle school children. Reliability coefficient was $r = 0.92$ and the tool were found to be reliable for the study.

PILOT STUDY

“The pilot study is miniature trial run of the methodology planned for the major project. It is a time for detecting errors and flaws being made in the instrument for gathering data. Then when the actual study is carried out, the researcher can profit by the mistakes made in the pilot study”.

The pilot study was conducted in Navarasam hr sec school, Palliyathu. It was conducted only after the tool presentation and approval of college of nursing faculty and dissertation committee. Validity and reliability of the instrument were tested during this time. The pilot study was done to obtain information to improve the project or assess its feasibility. The pilot study was conducted among 10 middle school children, 5 Middle school children in control group and 5 middle school children in experimental group. Who fulfilled the sample criteria for sample selection and those middle school children were excluded from the main study. Pre test, video assisted teaching program, and post test was done and feasibility of the study was established. It also helped to select suitable statistical method.

VIDEO ASSISSTED TEACHING PROGRAMME

Compact disc recorded the images and video pictures related to Road safety measures, background voice was given by investigator. The content of the CD was validated by the experts and by visual communication engineer for the clarity and accuracy of the visual.

DATA COLLECTION METHOD

“Data collection means information that is systematically collected course of a study “

The study was done for the month of November 2013. Official permission was obtained from the principal of **C.S.I Middle school at big kanchipuram. And C.S.I. Middle school at central Kanchipuram.** The 120 students who fulfilled the selection criteria were selected by simple random sampling. Confidentiality was ensured. The purpose of the study was explained to the Middle school children's teachers and the informed consent was obtained from the children's parents. The investigator interviewed the samples to collect information on background factors. Knowledge regarding Road safety measures was evaluated by the answers given by the middle school children. The average time taken from one group of Middle school children was 13 minutes. Post test was conducted after 7 days. The interview schedule was evaluated for the score.

PLAN FOR DATA ANALYSIS

According to **Manoj kumar yadav “** Data analysis a single question on a test or questionnaire or a single statement on a scale to determining the effectiveness of each test item by analyzing the sample's response to the item”

The data collected from subject were edited, compiled, and analyzed by using SPSS version 20. The probability level of 0.05 was used as the level of significance. The data were analyzed as follows;

1. Back ground Data obtained from the sample organized and summarized with the help of descriptive statistics like frequency, percentage distribution.

2. Comparing the pre test and post test knowledge scores of experimental group middle school children by using paired t' test.
3. Data on identifying the association between the post test knowledge with selected socio-demographic variables of experimental group were analyzed using descriptive and chi-square test.
4. Data on effectiveness of video teaching on Road safety measures among control group and experimental group with the use of unpaired' test.

ETHICAL CONSIDERATION

“The act of moral principal which the researcher has to follow while conducting nursing research”.

For the present study, the investigator took into consideration the ethical values. The study was accepted by the research and ethical committee. Prior permission was obtained from C.S.I Middle school at Big kanchipuram. Explanation regarding the purpose of the study was done and informed consent obtained from the study participant's for participating in the study. The concern got from the students parents also. The study participants had the right to discontinue from the study at any time. No physical harm was done.

CHAPTER-IV

ANALYSIS AND INTERPRETATION

According to **KERLINGER** an analysis is defined as the categorizing, ordering, manipulating and summing data to obtain answers to research hypothesis Question.

The analysis and interpretation of data of this study were based on the data collected by structure questionnaire method. The results were computed using descriptive and inferential statistics. The data were entered into excel sheet and analyzed using SPSS 20 version. The probability value of less than 0.05 was considered to be significant.

This chapter deal with the analysis and interpretation of the data collected in order to compare and determine the most effective video assisted program regarding road safety measures in middle school children. The main purpose of this chapter is to summarize, organize, evaluate, interpret and communicate numeric information. The results were computed using descriptive and inferential statistics

Objectives

- ❖ To assess the pre and post test level of knowledge on road safety measures among middle school children in experimental group and control group.
- ❖ To assess the effectiveness of video assisted teaching on road safety measures among experimental and control group.

- ❖ To find out the association between socio demographic variables and the level of knowledge regarding road safety measures among experimental group.

The data collected were edited, tabulated, analyzed, and interpreted, a findings obtained were presented in the form of tables, and diagrams under the following sections:

Section I: Data on background factors of Middle school children in experimental group, control group.

Section II: Data on pre and post test level of knowledge regarding Road safety measures among middle school children in experimental group.

Section III: Data on Effectiveness of video assisted teaching regarding Road safety measures among Middle school children in experimental group and control group.

Section IV: Data on association between post test level of knowledge and the selected background factors among Middle school children in experimental group.

Section V: Data on pre and post test level of knowledge regarding in various areas of Road safety measures.

SECTION I: DATA ON BACKGROUND FACTORS OF MIDDLE SCHOOL CHILDREN IN EXPERIMENTAL GROUP, CONTROL GROUP

TABLE – 1

FREQUENCY, PERCENTAGE OF MIDDLE SCHOOL CHILDREN ACCORDING TO BACKGROUND FACTORS IN EXPERIMENTAL AND CONTROL GROUP

S. No	BACKGROUND FACTORS	EXPERIMENTAL GROUP		CONTROL GROUP	
		F	%	F	%
1.	Age				
	a) 11 years	20	33.3	20	33.3
	b) 12 years	20	33.3	20	33.3
	c) 13 years	20	33.3	20	33.3
2.	Sex				
	a) Male	32	53	25	42
	b) Female	28	47	35	58
3.	Type of family				
	a) Nuclear family	40	67	31	52
	b) Join family	20	33	29	48
4.	Area of living				
	a) Urban	44	73	48	80
	b) Rural	16	27	12	20
5	Education of father				
	a) illiterate	16	27	17	28
	b) Primary school Education	21	35	18	30
	c) Secondary school Education	12	20	13	22
	d) Graduate	11	18	12	20

6.	Education of mother a) illiterate b) Primary school Education c) Secondary school Education d) Graduate	16 21 10 13	27 35 17 21	19 15 15 11	32 25 25 18
7.	Occupation of father a) Government job b) Private job c) Self business	10 25 25	17 42 42	19 21 20	32 35 33
8.	Occupation of Mother a) Government job b) Private job c) Self business	18 25 17	30 42 28	10 25 25	17 42 42
9.	Any previous information about road safety measures (a) yes (b) no If yes (a)Television (b) News paper (c) Radio (d) Posters	56 4 20 11 20 9	93 7 34 18 33 15	58 2 35 18 1 6	97 3 58 30 7 10
10.	Mode of transportations a) Bicycle b) Scooter c) Bus d) By walk	15 10 15 20	25 17 25 34	15 10 15 20	25 17 25 34

Table no 1: Shows the frequency, percentage of Middle school children according to background factors in experimental and control group.

Regarding Age both the experimental group and control group of 11 years, 12 years, 13 years, are equally distributed 20(33.3%).

Regarding Sex in experimental group majority 32(53%) were male and 28(47%) were females among control group majority 35(58%) were female, 25(42%) were male.

Regarding type of the family in experimental group majority 40 (67%) were nuclear family, 20(33%) were in joint family and control group majority 31(52%) were nuclear family, 29 (48%) were joint family .

Regarding Area of living in experimental group majority 44(73%%) of middle school children from urban and 16(27%) were rural area. in control group majority 48(80%) middle school children from urban, 12(20%) were rural area.

Regarding Education of father in experimental group majority 21(35%) were primary school education, 16(27%) were illiterate, 12(20%) were secondary school Education, 11(18%) were graduate and in control group majority 18(30%) primary school education, 17(28%) were illiterate, 13(22%) were secondary school Education, 12(20%) were graduate.

Regarding Education of mother in experimental group majority 21(35%) were primary school education, 16(27%) were illiterate, 10(17%) were secondary school Education, 13(21%) were graduate and in control group majority 19(32%) illiterate, 15(25%) were primary school education, 15(25%) were secondary school Education, 11(18%) were graduate.

Regarding occupation of father in experimental group majority 25(42%) were private employee and self employee, minority 10(17%) were government employee and in control group majority 21(35%) were private employee, 20 (33%) were Self business, Minority in control group 19(32%) were government employee.

Regarding occupation of mother in experimental group majority 25(42%) were private employee, 17(28%) were self employee, minority 18(30%) were government employee and in control group majority 25(42%) were private employee and self employee, Minority in control group 10(17%) were government employee

Regarding previous information about road safety measures in experimental group majority 56(93%) were yes, Minority in 4(7%) of middle school children not having the previous knowledge regarding road safety measures and in control group majority 58(97%) of middle school children having the previous knowledge regarding Road safety measures, minority 2(3%) of middle school children not having the previous knowledge regarding Road safety measures.

Regarding information about road safety measures in mass media in experimental group majority 20(34%) were television and radio, 11(18%) were news paper, the minority 9(15%) was posture. In control group majority 35(58%) were television, 18(30%) were news paper, 6 (10%) were posture. Minority 1(2%) were radio.

Regarding mode of transportation in experimental group majority 20(34%) were by walk, 15 (25%) were bi cycle and bus, 10 (17%) scooter, In control group majority 20(34%) were by walk,15(25%) were bicycle, bus, 10(17%) were scooter..

It was inferred that in experimental group all age groups 11-13yrs were equal distributed 20(33.3%) and the majority of the school children 32(53%) were male and belong to nuclear family 40(67%) and living in urban 44(73%) fathers were working in private 25(42%) their mothers were self employed 25(42%). Majority of the middle school children had previous knowledge on road safety were from tv and radio. Most of them come to school by walk.

It was inferred that in control group all age groups 11-13yrs were equal distributed 20(33.3%) and the majority of the school children 35(58%) were female and belong to nuclear family 31(52%) and living in urban 48(80%) fathers were working in private 21(35%) their mothers were self employed 25(42%). Majority of the middle school children had previous knowledge on road safety were from TV and radio. Most of them come to school by walk

Therefore both groups were comparable in relation to selected background factors.

SECTION II: DATA ON PRE AND POST TEST LEVEL OF KNOWLEDGE REGARDING ROAD SAFETY MEASURES AMONG MIDDLE SCHOOL CHILDREN IN EXPERIMENTAL GROUP.

Tables -2 Mean, SD and Mean difference and ‘t’ value on level of knowledge regarding road safety measures pre test and post test among experimental group.

Group	Mean	SD	SE	MD	t value	Significance
Pre-test score in experimental group	2.2800	0.40406	0.08101	-0.52	-4.662	P<.005 (S)
Post-test score in experimental group	2.8000	0.57286	0.50714			

S-Significant

NS-Non Significant

Table-2 Shows the Mean, standard deviation, SE, mean difference, ‘t’ value of pre test and post test level of knowledge regarding road safety measures among middle school children in experimental group.

In experimental group the overall Pre test mean score was 2.8000, standard deviations 0.40406, Std error were 0.08101 and post test mean score was 2.2800, standard deviations 0.57286, SE were 0.50714, The obtained t value -4.662 was significant at 0.05 ($p < 0.05$). ‘t’ values is greater than table value.

It was inferred that post test knowledge score was increased after the video teaching program in experimental group.

Figure: 3 Mean, standard deviation regarding pre test and post test level of knowledge regarding Road safety measures among Middle school children in experimental group

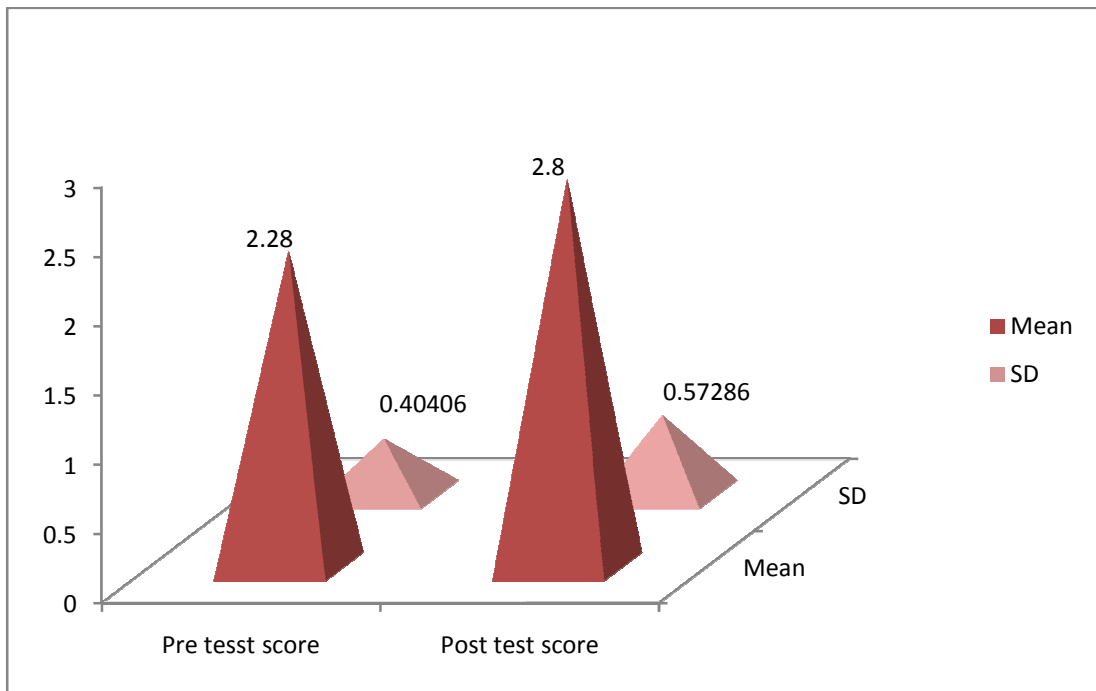


Figure: 3 Table Shows mean, standard deviation regarding pre test and post test level of knowledge regarding Road safety measures among Middle school children in experimental group

In experimental group the overall Pre test mean score was 2.8000, standard deviations 0.40406, and post test mean score was 2.2800, standard deviations 0.57286 so that the post test mean score, standard deviation is high, more than pre test mean, standard deviation of experimental group.

It was inferred that post test knowledge score increased after the video teaching program in experimental group.

SECTION III: DATA ON EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME REGARDING ROAD SAFETY MEASURES AMONG MIDDLE SCHOOL CHILDREN IN EXPERIMENTAL GROUP AND CONTROL GROUP.

TABLE: 3 Mean, range, standard deviation, mean percentage, mean difference, 't' value regarding post test knowledge score of control group, experimental

Group		Mean	SD	SE	MD	t	Significance
Experimental group	Pre-test score	2.2800	.40406	.08101	-0.52	-4.662	0.001 (p<0.05) Significance
	Post-test score	2.8000	.57286	.50714			
Control group	Pre-test score	1.4400	.50143	.07091	0.02	0.275	0.785 (p>0.05) Non-Significance
	Post-test score	1.4200	.49857	.07051			

S=Significant

NS=Non Significant

Table 3: Shows pre test and post test knowledge score mean, S.D, mean difference, 't' value of control group and experimental group.

Finding were in the experimental group post test knowledge mean score 2.8000, standard deviation was 0.57286, Std error .50714, MD -0.52, 't' value -4.662 and $\chi^2=0.001$.

In control group post test knowledge score mean 1.4200, standard deviation .49857, Std error .07051, MD 0.02 ,t value 0.275 and $\chi^2 = 0.785$ In experimental group 't' value t=-4.662 (P<0.05) was significant.

The obtain t value in experimental group is 0.001(p<0.05). 't' values is greater than table value.

It was inferred that post test knowledge score in experimental group significantly high compare to post test knowledge score in control group. So video assisted teaching program was effective to experimental group middle school children.

Figure: 2 Pre test and post test knowledge score mean, standard deviation in control and experimental group.

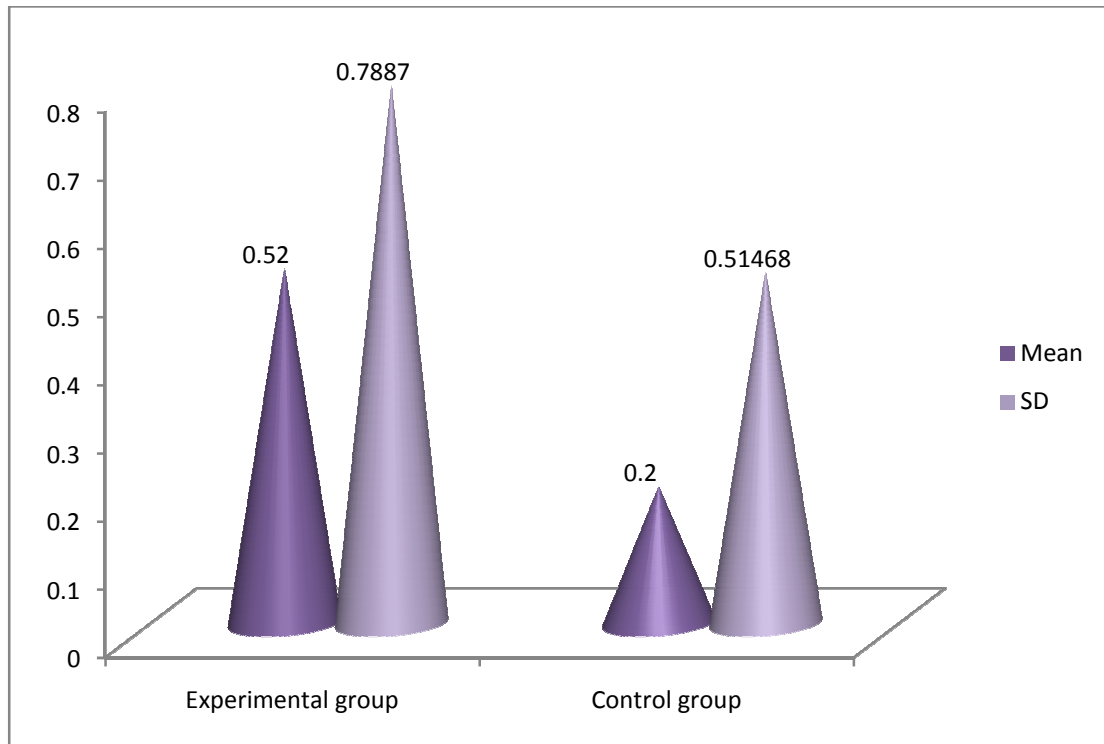


Figure 3: Shows pre test and post test knowledge score mean, S.D, mean difference, ‘t’ value of control and experimental group.

In experimental group post test knowledge mean score , standard deviation was high compare to control group post test knowledge mean score , standard deviation.

It was inferred that the experimental group post test knowledge score mean, standard deviation is high.

SECTION IV: DATA ON ASSOCIATION BETWEEN POST TEST KNOWLEDGE WITH SELECTED BACKGROUND FACTORS AMONG MIDDLE SCHOOL CHILDREN IN EXPERIMENTAL GROUP

Table-4

S/N	Demographic factors	B	t value
1.	Age	0.375	2.280 (P>0.05) (NS)
2.	Sex	0.363	2.578 (P>0.05) (NS)
3.	Type of family	0.035	0.231(P>0.05)(NS)
4.	Area of living	0.046	0.374 (P>0.05)(NS)
5.	Education of father	0.057	0.398 (P>.0.05)(NS)
6.	Education of mother	0.237	1.623 (P<0.05)(NS)
7.	Occupation of father	0.013	0.093 (P>0.05)(NS)
8.	Occupation of Mother	0.179	1.191 (P>0.05)(NS)
9.	Any previous information about road safety measures	0.102	0 746 (P< 0.05)(NS)
10.	Mode of transportations	0.035	231 (P<0.05)(NS)

S-Significant

NS-Non significance

Table-4 Shows β vale, t value of post knowledge score with selected background factors among middle school children in experimental group.

It was inferred that the all the background factors such as age, sex, occupation of father, occupation of mother. occupation type of family, Area of living, Education of father, Education of mother, any previous information about road safety measures yes, mode of transportations were not significant (P<0.05).

SECTION V: DATA ON PRE AND POST TEST LEVEL OF KNOWLEDGE REGARDING IN VARIOUS AREAS OF ROAD SAFETY MEASURES IN EXPERIMENTAL GROUP.

TABLE- 5

FREQUENCY AND PERCENTAGE DISTRIBUTION ON LEVEL OF KNOWLEDGE IN EXPERIMENTAL GROUP

N=60

Experimental group	LEVEL OF KNOWLEDGE					
	Adequate (>75%)		Moderately adequate (50-75%)		Inadequate (<50%)	
	No	%	No	%	No	%
Pre-test	17	28	40	67	3	5
Post-test	40	67	20	34	-	-

Table – 2 shows frequency and percentage distribution on level of knowledge in experimental group

It was inferred that the level of knowledge among primary school children before and after the video assisted teaching program. Before the video assisted teaching, 17 (28%) students had adequate knowledge, 40 (67%) students had moderately adequate knowledge and 3(5%) students had inadequate knowledge. After the video assisted teaching the level of knowledge increased significantly and 40 (67%) students gained adequate knowledge, 20 (34%) students had gained moderately adequate level of knowledge.

CHAPTER –V

SUMMARY, FINDINGS, DISCUSSION, IMPLICATIONS, LIMITATIONS, RECOMMENDATIONS AND CONCLUSION

This chapter deals with summary, findings, discussion, implications, limitations, recommendations and conclusion. The essence of any research project is based on study findings, limitations; interpretation of the research results and recommendations to incorporate the study implications. It also gives meaning to the results obtained in the study.

SUMMARY

The prime aim of the study was to assess the knowledge on Road safety measures before and after video assisted teaching program among middle school children.

Objectives

- ❖ To assess the Pre and post test level of knowledge on road safety measures among middle school children in experimental group and control group.
- ❖ To assess the effectiveness of video assisted teaching on Road safety measures among experimental group, control group
- ❖ To find out the association between socio demographic variables and the level of knowledge regarding road safety measures among experimental group.

HYPOTHESIS

- ❖ H1: There is a significance difference between pre test the level of knowledge children regarding road safety measures among middle school in experimental group and control group.
- ❖ H2 : There is a significance between post test level of knowledge on road safety measures among middle school children in experimental and control group.
- ❖ H3: There is a significant association between the post test levels of knowledge regarding road safety measures with their selected demographic variables among the middle school children in experimental group.

The Review of literature was done for the present study and presented in the following headings,

- ❖ Studies related to incidence, prevalence of road traffic accidents.
- ❖ Studies related to road safety and teaching awareness of road traffic accidents.

The conceptual framework adopted for the present study was based on the Ludwig von bertalanffy modified general system theory model. This model helped the investigator to assess the knowledge on pelvic road safety measures before and after conducting video assisted teaching program.

The research design selected for the present study was a quasi experimental two group pretest and posttest design to evaluate the effectiveness of video assisted teaching program on Road safety measures. The independent variable was video assisted teaching program and dependent variables were level of knowledge regarding road safety measures among middle school children.

The investigator developed a structured questionnaire as tool for the present study. The content validity of the tool was established by 3 experts. The reliability of the tool was done by test retest method Reliability coefficient was $r = 0.92$ and the tool was found to be reliable for the study. Pilot study was conducted in CSI Middle school big Kanchipuram among 10 students, who fulfilled the sample selection criteria. The study was found to be feasible.

The main study was conducted in CSI middle school big kanchipuram, CSI middle school in kanchipuram. Prior permission from the authorities was sought and obtained. Simple random sampling technique was used to select the samples and informed consent was obtained. Pre test was done to assess the knowledge on Road safety measures. For experimental group video assisted teaching program was conducted after 10 days from pre test. Post test was done on 7th day of video class for control group and experimental group. The data gathered were analyzed and interpreted using SPSS package (version 20) A probability of <0.05 level of significance was considered significant.

FINDINGS

The major findings of the study were classified under following headings,

Finding I: Data on background factors of Middle school children in experimental group, control group.

It was inferred that experimental group all age group were equal 20(33.3%) in the age group of 11-13 years, majority 32(53%) were male and their type of family 40(67%) nuclear family, most of the middle school children 44(73%) from urban, majority of education of father and mother

21(35%) primary school education. Occupation of father 25(42%) were private and self employee for mother 25(42%) were private employee. And majority of 56(93%) middle school children having the previous knowledge road safety measures 20(34%) previous information by television and radio. Mode of transportation majority 20(34%) by walk.

It was inferred that control group 20(33.3%) all the age group of 11-13 years equally distributed, majority 35(58%) were female and their type of family 31(52%) nuclear family, most of the middle school children 48(80%) from urban, majority of education of father and mother 18(30%) primary school education. Occupation of father 21(35%) were private employee for mother 25(42%) were private employee, self employee. And majority of 58(97%) middle school children having the previous knowledge road safety measures 35(58%) previous information by television. Mode of transportation majority 20(40%) by walk.

Therefore both groups were comparable in relation to selected background factors.

Finding II: Data on pre and post test level of knowledge regarding Road safety measures among middle school children in experimental group.

In experimental group the overall Pre test mean score was 2.8000, standard deviations 0.40406, Std error were 0.08101 and post test mean score was 2.2800, standard deviations 0.57286, SE were 0.50714, The obtained t value -4.662 was significant at 0.05 ($p < 0.05$). 't' values is greater than table value.

It was inferred that post test knowledge score was increased after the video teaching program in experimental group.

Finding III: Data on Effectiveness of video assisted teaching regarding Road safety measures among Middle school children in experimental group and control group.

Finding were in the experimental group post test knowledge mean score 2.8000, standard deviation was 0.57286, Std error .50714, MD -0.52, 't' value -4.662 and $\chi^2=0.001$.

In control group post test knowledge score mean 1.4200, standard deviation .49857, Std error .07051, MD 0.02, t value 0.275 and $\chi^2 = 0.785$ In experimental group 't' value $t=-4.662$ ($P<0.05$) was significant.

The obtain t value in experimental group is 0.001($p<0.05$). 't' values is greater than table value.

It was inferred that post test knowledge score in experimental group significantly high compare to post test knowledge score in control group. So video assisted teaching program was effective to experimental group middle school children.

Finding IV: Data on association between post test level of knowledge and the selected background factors among Middle school children in experimental group.

It was inferred that the all the background factors such as age, sex, occupation of father, occupation of mother. occupation type of family, Area of living, Education of father, Education of mother, any previous information about road safety measures yes, mode of transportations were not significant ($P<0.05$).

There was no significant association between the level of knowledge and selected demographic factors.

Findings v: Data on pre and post test level of knowledge regarding in various areas of Road safety measures.

It was inferred that the level of knowledge among primary school children before and after the video assisted teaching program. Before the video assisted teaching, 17 (28%) students had adequate knowledge, 40 (67%) students had moderately adequate knowledge and 3(5%) students had inadequate knowledge. After the video assisted teaching the level of knowledge increased significantly and 40 (67%) students gained adequate knowledge, 20 (34%) students had gained moderately adequate level of knowledge.

DISCUSSION

The results of the study were discussed according to the objectives of the study.

Objectives 1: To assess the pre and post test level of knowledge on road safety measures among middle school children in experimental group and control group.

In experimental group the overall Pre test mean score was 2.8000, standard deviations 0.40406, Std error were 0.08101 and post test mean score was 2.2800, standard deviations 0.57286, SE were 0.50714, The obtained t value -4.662 was significant at 0.05 ($p < 0.05$). 't' values is greater than table value.

It was inferred that post test knowledge score was increased after the video teaching program in experimental group.

Objective: 2 To assess the effectiveness of video assisted Teaching on road safety measures among experimental group.

Finding were in the experimental group post test knowledge mean score 2.8000, standard deviation was 0.57286, Std error .50714, MD -0.52, 't' value -4.662 and $\chi^2=0.001$.

In control group post test knowledge score mean 1.4200, standard deviation .49857, Std error .07051, MD 0.02 ,t value 0.275 and $\chi^2 = 0.785$ In experimental group 't' value t=-4.662 (P<0.05) was significant.

The obtain t value in experimental group is 0.001(p<0.05). 't' values is greater than table value.

It was inferred that post test knowledge score in experimental group significantly high compare to post test knowledge score in control group. So video assisted teaching program was effective to experimental group middle school children.

The above findings were supported by these studies which showed the effectiveness of video assisted teaching program regarding road safety measures among middle school children.

VAN OSS T et.al (2013) conducted the experimental study to determine the effectiveness of pedestrian and road traffic safety education among 200 school children in India. The sample selected by Simple random method the pre test post test conducted by demographic data and structured questionnaires .Road safety Education program done by structured teaching method. The study finding revealed that there is significance the effectiveness of pedestrian road traffic safety Education. The study finding concludes that Road safety education program will improve the children knowledge.

LACHAPELLE U et.al (2013) conducted the experimental study to evaluate the effectiveness of bicycle education programs to reduce bicycle crashes among 600 school children in India. the sample selected by simple random method.300 students in experimental group,300 control group, Tests administered before and after training were designed to assess knowledge acquired during the training, questions assessed children's existing knowledge of helmet use and other equipment, bi-cycle safety as well as their ability to discriminate hazards and understand rules of the road. Response to individual questions overall pre and post test training scores, and change in test scores were compared using comparison of proportion-test and ordinary least squares regression. The study finding revealed that school based programmed recorded improvement in test details.

Objectives 3: To find out the association between socio demographic variables and the level of knowledge regarding road safety measures among experimental group.

There was no significant association between the level of knowledge and selected demographic factors.

IMPLICATION

The findings of the study have the following implications in nursing.

Implications for nursing practice

- ❖ Video assisted teaching program was helped to improve the clinical staff knowledge level.
- ❖ Video assisted teaching method can be used as a one method of teaching in clinical nursing.

- ❖ Video assisted teaching method can use in illiterate people also. It helps to easy understanding the topics; it can use in mass group and community.
- ❖ The nurse plays an important role in disease prevention and health promotion education program with effective teaching strategies which motivate people to follow healthy practice day today life.
- ❖ Health information can be impaired through various methods like lecture, mass media, pamphlets, information booklet.

Implication for nursing education:

- ❖ The curriculum in India has little emphasis on knowledge on road safety measures.
- ❖ The nurse educators have the responsibility to update the knowledge, attitude and practice of nursing students on knowledge and awareness about road safety measures.
- ❖ The finding of the study can serve as guidelines for the nurse educators for planning and conducting educational program for student nurses regarding road safety measures.
- ❖ The nursing students should be made aware about their role in health promotion and disease prevention.
- ❖ The students should be motivated to make up innovational approaches to provide health education in different setting.
- ❖ The student teaching experience should emphasize on teaching various community groups on preventive and promotive health practice.

- ❖ Nurse at post graduates level have to develop their skill in preparing health teaching material according to the communities level of understanding ,improved and newes technique have to be used for motivating public participation in road safety educational program.

Implication for nursing administration

- It helps the nursing students to manage with mass group, how can conduct awareness program to community and public.
- It help the nurse to learn how they can manage the problem if arise, organize the program. It gives more aware about program planning and planning for budget.
- The nurse administrator should interest in providing information on health prevention of road traffic accidents to the public and to the community
- The nurse as an administrator should plan and organize educational program for nursing personnel and motivate them in conducting road safety program beneficial to the public.
- Planning and organization of such programs requires efficient team work, planning for man power, money, material, and methods and minutes to conduct successful education program both at the hospital and community level.

Implication for nursing research

- ❖ It helps the student nurses to give idea to do research in effectiveness of various methods of road safety measures.
- ❖ There is a need of extensive and intensive research in this area so that strategies for educating nurse for prevention of road traffic accidents.

- ❖ The nurse researcher should conduct research on various aspects of road safety, which provides more scientific data and adds more scientific body of information to the nursing profession.

LIMITATIONS

- ❖ Video recording procedure was time consuming and expensive.
- ❖ Sample size was less to make any generalization.
- ❖ Limited to only school students.

PERSONAL EXPERIENCE

- ❖ The investigator has gained lot of new information and experience in many ways starting from the searching of research problem till the submission of the report.
- ❖ The researcher gained new experienced while developing compact disc for video assisted teaching
- ❖ Apart from the struggle and tension, doing research was quite interesting and helpful.
- ❖ Investigator got limited literature review

RECOMMENDATIONS

- ❖ A short period of intervention can be studied for more reliability and effectiveness.
- ❖ The study can be replicated in different setting to strengthen the finding.

CONCLUSION

The following conclusions were drawn from the findings of the study. Video assisted teaching method is an effective method of giving information to people. This method helps to easy understanding and make more aware about road safety measures, it helps to prevent development of accidents.

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APPENDIX - 1

LETTER GRANTING PERMISSION TO CONDUCT THE STUDY

G.O.M.S.No. : 40 dt : 05.02.2007



SHIVPARVATHI MANDRADIAR INSTITUTE OF HEALTH SCIENCE (COLLEGE OF NURSING)

Palayakottai (Po) Tirupur (Dt) - 638 108, Tamil Nadu

Tel : 04257- 242200, 241800, Mobile : 94860 33000 Fax : 04257-242200

E-Mail : spmih@gmail.com. Web : www.spmihcollegeofnursing.org

(Recognized by Indian Nursing Council, Tamilnadu Nurses & Midwives Council, Affiliated to The TamilNadu Dr.M.G.R.Medical University)

To,

Date.....

Mrs.S.Jayamargaret.M.A.,M.Phil.,
Head Mistress
C.S.I.Middle School
Big Kanchipuram-631501.

Respected Madam,

Greetings from Shivparvathi Mandradiar Institute of Health Science, Palayakottai, Tirupur.

Sub: Requisition to avail the permission to conduct Project – Regarding.

This is to certify that **Mr.HUDSON SAMUEL** is a bonafied student of our college studying M.Sc. Nursing II- Year in the academic year of 2013- 14. As part of the M.Sc Nursing curriculum prescribed by the TamilNadu Dr. M.G.R. Medical University, Chennai, he needs to conduct a project and he is willing to do at your esteemed Institution. So, kindly do the needful and grant him permission to conduct the study.

The details of the project will be briefed to you by him in person.

Thanking you

N. S. Anand
Yours sincerely,

PRINCIPAL
SHIVPARVATHI MANDRADIAR
INSTITUTE OF HEALTH SCIENCES
PALAYAKOTAI-638 108.

Permission Granted
S. Jaya Margaret

SCH. No. 29041010c
HEADMISTRESS
C.S.I. MIDDLE SCHOOL,
BIG KANCHEEPURAM - 631



LETTER GRANTING PERMISSION TO CONDUCT THE STUDY

APPENDIX – 3

LETTER REQUESTING SUGGESTION FOR ESTABLISHING CONTENT VALIDITY

From,

301227003,

II Year M.Sc (N),

Shiv Parvathi Mandradiar Institute of Health Sciences,

Palayakottai, Tirupur.

To,

_____,
_____,
_____.

THROUGH,

The Principal,

Shiv Parvathi Mandradiar Institute of Health Sciences,

Palayakottai, Tirupur.

Respected Sir/Madam

Subject: Letter requesting opinion and suggestions from experts for establishing content validity of tool...Regarding

I am II Year M.Sc (N) student in SPIHS. As a partial fulfillment of Masters Degree in Nursing, I have selected the topic mentioned below for the research project to be submitted to “The Tamil Nadu Dr. M.G.R. Medical University Chennai”, Topic: “A study to assess the effectiveness of video assisted teaching on level of knowledge regarding road safety measures among middle school children in selected school at kanchipuram” I kindly request you to validate the following enclosure and give your expert opinion and suggestions for necessary modifications of the tool.

Thanking you in Anticipation

Place:

Yours sincerely,

Date:

(301227003)

Enclosed here with: 1.Proposal, 2.Tool

APPENDIX - 4

CONTENT VALIDITY CERTIFICATE

I hereby certify that I have validated the tool of 301227003 M.Sc Nursing student is undertaking “A study to assess the effectiveness of video assisted teaching on level of knowledge regarding road safety measures among middle school children in selected school at Kanchipuram”

Signature of the Expert :

Name :

Designation :

Date :

APPENDIX – 5

LIST OF EXPERTS

1. Mrs. Deepa M.Sc(N)
Associate professor,
Vivakanantha college of Nursing
Selam.
2. Mrs. Anusia Devi M.Sc (N),
Associate professor,
Vellalar college of Nursing
Erode.
3. Ms.Bhubaneswari M.Sc(N)
Associate professor,
SPM college of Nursing,
Erode.

APPENDIX - 6

INFORMED CONSENT REQUISITION FORM

Dear participants!

I am 301227003 Studying 2nd year M.Sc (N) at Shivparvathi Mandradiar Institute of Health Sciences, Palayakottai, Tirupur. As part of fulfillment of the Program, I am conducting “A study to assess the effectiveness of video assisted teaching on level of knowledge regarding road safety measures among middle school children in selected school at Kanchipuram”

I have prepared a procedure for video assisted teaching on level of knowledge regarding road safety measure. All the data collected will be kept confidential and be used for my study purpose only. I kindly request to extent your co-operation and willingness to participate in the study by giving your written consent.

Thanking you

Signature of the Investigator

(301227003)

ஆய்வில் கலந்து கொள்ள பெற்றோர் அளிக்கும் ஒப்புதல் படிவம்

தமிழ்நாட்டில் பழையகோட்டையில் உள்ள சிவபார்வதி மன்றாடியர் செவிலியர் கல்லூரியில் முதுநிலை இரண்டாம் ஆண்டு செவிலியர் பட்டப்படிப்பு பயிலும் மாணவன் 301227003 நடத்தும் “வீடியோ பாட தொகுப்பு முறை மூலம் சாலை பாதுகாப்பு விதிமுறைகளைப் பற்றிய ஒப்பீடு” பற்றிய ஆய்வில் எனது மகன்/மகள் - கலந்து கொள்ள யாருடைய வற்புறுத்தலும் இன்றி நான் மனபூர்வமாக ஒப்புதல் அளிக்கிறேன்.

என்னுடைய மகன்/மகள் எந்த நேரத்திலும் இந்த ஆய்வில் இருந்து எவ்வித நிபந்தனைகளும் இன்றி விலகிக்கொள்ளலாம் என்பதை அறிவேன்.

அத்தோடு இந்த ஆய்வில் பங்குபெறுவது எனது மகன்/மகளின் படிப்பிற்கு எவ்வித பாதிப்பையும் ஏற்படுத்தாது என்பதையும், வலி ஏற்படுத்தும் எவ்வித செயல்பாடுகளும் இதில் இல்லை என்பதையும், இந்த ஆய்வின் முடிவுகள் இரகசியமாக பாதுகாக்கப்படும் என்பதையும் நான் அறிவேன்.

தேவை ஏற்படும் போது இந்த ஆய்வின் முடிவுகள் செவிலியர் சார்ந்த பத்திரிக்கைகளிலும் கருத்தரங்குகளிலும் வெளியிட முழு சம்மதம் அளிக்கிறேன்.

இந்த ஆய்வினைப் பற்றிய சந்தேகங்களைத் தெளிவு படுத்திக் கொள்ள மாணவன் 301227003 ஐ எந்த நேரத்திலும் கைபேசியில் தொடர்பு கொள்ளலாம் என்பதையும் அறிவேன். (96294 88344)

பங்கு கொள்பவரின் கையொப்பம் :

தேதி :

ஆராய்ச்சியாளரின் கையொப்பம் :

தேதி :

APPENDIX - 7

SELF ADMINSTURED GUIDE AMONG C.S.I MIDDLE SCHOOL CHILDREN AT KANCHIPURAM

Instruction:

Code No:

This section deals with the demographic variables of respondents. The interviewer will pose questions listed below and place a tick mark against the correct answers.

SECTION -I: DEMOGRAPHIC VARIABLES

PART I

DEMOGRAPHIC VARIABLES

1. Age

- (a) 11years
- (b) 12 years
- (c) 13 years

2. Sex

- (a) Male
- (b) Female

3. Type of the family

- (a)Nuclear family
- (b) Joint family

4. Area of living

- (a) Urban
- (b) Rural

5. Education of the father

- (a) Illiterate
- (b) Primary school education
- (c) Secondary school education
- (d) Graduate

6. Education of the mother

- (a) illiterate
- (b) Primary school education
- (c) Secondary school education
- (d) Graduate

7. Occupation of the father

- (a) Government job
- (b) Private job
- (c) Nothing

8. Occupation of the mother

- (a) Government job
- (b) Private job
- (c) Nothing

9. Any previous information about road safety measures

(a) yes

(b) no

If yes

(a) Television

(b) News paper

(c) Radio

(d) Posters

10. Mode of transportation

(a) Bicycle

(b) bike

(c) Bus

(d) By walk

SECTION II

QUESTIONNAIRE RELATED TO KNOWLEDGE

1. What is an accident?

- a) Walking on the road
- b) Sequence events with injury
- c) Lying in the road
- d) Falling on the road

2. What is the major cause of accident?

- a) Not following safety measures
- b) Normal speed
- c) Vehicle are not in good condition
- d) Walking on the road

3. Where do the most child pedestrian accidents happen?

- a) Near School
- b) Near park
- c) Near home
- d) Near playground

4. Which is the safer side to walk the Road?

- a) Right Side
- b) Left Side
- c) Both the sides
- d) According to the situation

5. Which line is used to cross the road?

- a) Zebra Line
- b) Linear Line
- c) Straight Line
- d) Zigzag Line

6. What you must do before crossing the road?

- a) Lision, Look and cross
- b) Stop, Lision, and go
- c) Cross any where you Look
- d) Look on right side and cross

7. How to travel safety in a bus?

- a) Foot board
- b) Sitting in the seat
- c) Sitting in the foot board
- d) Standing

8. How to prevent injuries in a car accident?

- a) By using Seat belt
- b) By Sitting at the back
- c) Opening the window immediately
- d) Putting seat cover

9. What is the purpose of wearing helmet?

- a) Prevent accident.
- b) Protects from accidents
- c) Protect the head
- d) All the above

10. What are the colours used in traffic signals?

- a) Red ,green ,yellow
- b) Blue ,black ,yellow
- c) Red , blue, black
- d) Yellow , orange, green

11. In the traffic signal, Which colour indicates the vehicle to move on the road?

- a) Green
- b) Red
- c) yellow
- d) Black

12. In the traffic signal, Which colour indicates the vehicle to stop on the road?

- a) Green
- b) Red
- c) yellow
- d) Black

13. In the traffic signal, Which colour indicates the vehicle to be ready on stop line?

- a) Green
- b) Red
- c) yellow
- d) Black

14. In the traffic signal, Where the vehicle should stop?

- a) Zebra Line
- b) Linear Line
- c) Stop Line
- d) Zigzag Line

15. Which part of the body is commonly affected in road traffic accidents?

- a) Head
- b) Chest
- c) legs
- d) Hand

16. When is the worst time of the day for road accidents involving children?

- a) While going and coming from school
- b) While going for lunch
- c) Late at night
- d) All the above

17. Which contact number should be used when road traffic accidents occur?

- a) 108
- b) 100
- c) 101
- d) 191

18. Which is the safe method to prevent accident?

- a) Holding the hands of parents.
- b) Stop, look and listen.
- c) Run across the road without looking.
- d) Holding the hands of someone.

19. Left indicator of vehicle means ?

- a) Take Right turn
- b) Go straight
- c) Take Left turn
- d) Take U turn

20. Which is the missing word in the following Stop, _____ , Go.

- a) Today
- b) Think
- c) Listen
- d) Do

21. Which part of the bi-cycle need to be checked every day?

- a) Paint work
- b) Tyres, light and breaks
- c) Mirror
- d) Seat

22. Which of following is often the shape of a road safety sign giving information?

- a) Diamond
- b) Triangle
- c) Rectangle
- d) square

23. Which senses are best used to keep you safe on the roads?

- a) Seeing and touching
- b) Hearing and smiling
- c) Hearing and seeing
- d) Touching and hearing

24. How to cross the road after getting down from the bus?

- a) Cross in front of the bus that the driver can see you
- b) Cross behind the bus
- c) Wait for the bus to move off and find a safe place to cross.
- d) Cross on zebra line only

25. Which side of a car is safest to get in?

- a) The Road side
- b) The pavement side
- c) The driver side.
- d) The back side.

26. What is the colour of the school bus?

- a) Red
- b) Blue
- c) Yellow
- d) Green

27. How many people may legally be carried on a bike?

- a) 2
- b) 4
- c) 1
- d) 3

28. what is the symbol denotes?



- a) Zebra Line
- b) Linear Line
- c) Straight Line
- d) Zigzag Line

29. what is the symbol denotes?



- a) Wrong way
- b) Railway Line
- c) U turn
- d) Speed Breaker

30. what is the symbol denotes?



- a) Hold the hand and cross
- b) Railway Line
- c) School zone
- d) Don't cross.

பகுதி 1

சுயகுறிப்பு விபரங்கள்

1. வயது

அ) 11 ஆண்டுகள்

ஆ) 12 ஆண்டுகள்

இ) 13 ஆண்டுகள்

2. பாலினம்

அ) ஆண்

ஆ) பெண்

3. குடும்ப அமைப்பு

அ) தனிக்குடும்பம்

ஆ) கூட்டுக்குடும்பம்

4. வாழும் இடம்

அ) நகரம்

ஆ) கிராமம்

5. தந்தையின் கல்வி தகுதி

அ) படிக்கவில்லை

ஆ) ஆரம்ப கல்வி

இ) மேல்நிலைக்கல்வி

ஈ) பட்டப்படிப்பு

6. தாயின் கல்வித்தகுதி

அ) படிக்கவில்லை

ஆ) ஆரம்ப கல்வி

இ) மேல்நிலைக்கல்வி

ஈ) பட்டப்படிப்பு

7. தந்தையின் தொழில்

- அ) அரசு பணி
- ஆ) தனியார் பணி
- இ) கூலி வேலை
- ஈ) சுய தொழில்

8. தாயின் தொழில்

- அ) அரசு பணி
- ஆ) தனியார் பணி
- இ) கூலி வேலை
- ஈ) சுய தொழில்

9. சாலை பாதுகாப்பு விதிகள் குறித்து முன் அறிவு உள்ளதா?

- அ) ஆம்
- ஆ) இல்லை

“ஆம்” என்றால் எதன் மூலம் அறிந்து கொண்டீர்கள்

- அ) பெற்றோர்கள்
- ஆ) தொலைகாட்சிபெட்டி
- இ) வானொலி
- ஈ) செய்தித்தாள்

10. பயணிக்கும் முறை

- அ) மதிவண்டி
- ஆ) இருசக்கர வாகனம்
- இ) பேருந்து
- ஈ) நடைபயணம்

பகுதி II

அறிவு சார்ந்த கேள்விகள்

1. விபத்து என்றால் என்ன?

- அ) சாலையில் நடந்துசெல்வது
- ஆ) எதிர்பாராமல் ஏற்படும் காயம்
- இ) சாலையில் படுத்துக்கொள்வது
- ஈ) சாலையில் தடுக்கி விழுவது

2. விபத்து ஏற்பட தலையாய காரணம் என்ன?

- அ) சாலை பாதுகாப்பு விதிகளை மீறுதல்
- ஆ) மிதமான வேகம்
- இ) பராமரிப்பு இல்லாத வாகனம்
- ஈ) சாலையில் நடப்பது

3. குழந்தைகளுக்கு எந்த இடத்தில் அதிகமாக விபத்து ஏற்படுகிறது?

- அ) பள்ளி அருகில்
- ஆ) பூங்கா அருகில்
- இ) வீட்டு அருகில்
- ஈ) விளையாட்டு திடல் அருகில்

4. சாலையில் எந்த பக்கத்தில் நடப்பது பாதுகாப்பானது?

- அ) வலது பக்கம்
- ஆ) இடது பக்கம்
- இ) இரண்டு பக்கமும்
- ஈ) சூழ்நிலைக்கு ஏற்றார்போல்

5. எந்த கோட்டின் வழியாக சாலையை கடக்க வேண்டும்?

அ) வரிகோடு

ஆ) தனிக்கோடு

இ) நேர்கோடு

ஈ) வளைவு கோடு

6. சாலையை கடப்பதற்கு முன் நீ கவனிக்க வேண்டியவை என்ன?

அ) கவனி, பார்த்தல், கடத்தல்

ஆ) நில, கவனி, செல்

இ) எந்த இடத்திலும் பார்த்து கடத்தல்

ஈ) வலது புறம் பார்த்து கடத்தல்

7. பாதுகாப்பான முறையில் எவ்வாறு பேருந்தில் பயணம் செய்யவேண்டும்?

அ) பேருந்தின் படிக்கட்டில்

ஆ) இருக்கையில் அமர்ந்து

இ) பேருந்தின் படிக்கட்டில் அமர்ந்து

ஈ) நின்று கொண்டு

8. கார் விபத்திலிருந்து தற்காத்து கொள்வது எப்படி?

அ) சீட் பெல்ட் அணிதல்

ஆ) காரின் பின்புற இருக்கையில் அமர்ந்து கொள்வது

இ) கார் கதவை உடனடியாக திறந்து கொள்வது

ஈ) இருக்கை உறை போட்டு கொள்வது

9. தலைகவசம் அணிவதின் அவசியம் என்ன?

அ) விபத்தை தவிர்ப்பது

ஆ) விபத்திலிருந்து தற்காத்து கொள்வது

இ) தலையை காத்துக்கொள்வது

ஈ) மேற்குறிப்பிட்ட அனைத்தும்

10. போக்குவரத்து சிக்னல்களில் பயன்படுத்தப்படும் வண்ணங்கள் என்ன?

அ) சிவப்பு, மஞ்சள், பச்சை

ஆ) நீலம், கருப்பு, மஞ்சள்

இ) சிவப்பு, நீலம், கருப்பு

ஈ) மஞ்சள், ஆரஞ்சு, பச்சை

11. போக்குவரத்து சிக்னல்களில் எந்த நிறம் விளக்கு எரிந்தால் புறப்பட வேண்டும்?

அ) பச்சை

ஆ) சிவப்பு

இ) மஞ்சள்

ஈ) கருப்பு

12. போக்குவரத்து சிக்னல்களில் எந்த நிறம் விளக்கு எரிந்தால் நிற்க வேண்டும்?

அ) பச்சை

ஆ) சிவப்பு

இ) மஞ்சள்

ஈ) கருப்பு

13. போக்குவரத்து சிக்னல்களில் எந்த நிறம் விளக்கு எரிந்தால் புறப்பட தயாராக வேண்டும்?

- அ) பச்சை
- ஆ) சிவப்பு
- இ) மஞ்சள்
- ஈ) கருப்பு

14. போக்குவரத்து சிக்னலில் எந்த இடத்தில் வாகனத்தை நிறுத்த வேண்டும்?

- அ) வரிகோடு
- ஆ) தனிக்கோடு
- இ) நிறுத்த கோடு
- ஈ) வளைவு கோடு

15. சாலை விபத்துக்களில் பெரும்பாலும் அடிபடும் உறுப்பு எது?

- அ) தலை
- ஆ) மார்பு
- இ) கால்
- ஈ) கை

16. பள்ளி குழந்தைகளுக்கு விபத்து எப்பொழுது ஏற்படும்?

- அ) பள்ளிக்கு செல்லும்பொழுதும் வரும் பொழுதும்
- ஆ) மதிய உணவிற்கு செல்லும் பொழுது
- இ) நள்ளிரவில்
- ஈ) மேலே குறிப்பிட்ட அனைத்தும்

17. விபத்து ஏற்படும் பொழுது தொடர்பு கொள்ள வேண்டிய தொலைபேசி எண் என்ன?

அ) 108

ஆ) 100

இ) 101

ஈ) 191

18. விபத்து ஏற்படாமல் தடுக்க பின்பற்ற வேண்டிய விதிமுறைகள் என்ன?

அ) பெற்றோர் கையை பிடித்து செல்ல வேண்டும்

ஆ) நில் கவனி செல்

இ) எதையும் பார்க்காமல் வேகமாக சாலையில் ஓடிவிட வேண்டும்

ஈ) அருகில் உள்ளவர் கையை பிடித்து செல்ல வேண்டும்

19. வாகனத்தின் இடது காப்பொலி காட்டினால் என்ன?

அ) வலது புறம் வளைதல்

ஆ) நேராக செல்லுதல்

இ) இடது புறம் வளைதல்

ஈ) "பு" வளைதல்

20. கொடுக்கப்பட்டுள்ளவற்றில் விடுபட்ட சொல் எது? நில் _____ செல்

அ) இன்று

ஆ) யோசி

இ) கவனி

ஈ) செய்

21. மிதிவண்டியில் தினந்தோறும் கவனிக்க வேண்டிய பகுதி எது

அ) வர்ணம் பூசுதல்

ஆ) சக்கரம், விளக்கு, பிரேக்

இ) கண்ணாடி

ஈ) இருக்கை

22. சாலை பாதுகாப்பு குறியீடுகள் எப்பொழுதும் எந்த வடிவத்திற்குள் அமைக்கப்பட்டிருக்கும்

அ) முக்கோணம்

ஆ) வட்டம்

இ) சதுரம்

ஈ) மேற்குறிப்பிட்ட அனைத்தும்

23. பாதுகாப்பாக சாலையில் செல்வதற்கு எந்த புலன் சிறப்பாக பயன்படுகிறது?

அ) பார்ப்பதும், தொடுவதும்

ஆ) கேட்பதும் சிரிப்பதும்

இ) கேட்பதும் பார்ப்பதும்

ஈ) தொடுவதும் கேட்பதும்

24. பேருந்தை விட்டு இறங்கியதும் சாலையை எவ்வாறு கடக்க வேண்டும்?

அ) ஓட்டுனர் பார்க்க பேருந்தின் முன் கடக்க வேண்டும்

ஆ) பேருந்தின் பின்புறம் கடக்க வேண்டும்

இ) பேருந்து சென்ற பின் சாலையை கடக்க வேண்டும்

ஈ) வரி கோட்டில் மட்டும் கடக்க வேண்டும்

25. காரில் ஏறுவதற்கு பாதுகாப்பான வழி எது?

அ) சாலைபுறம்

ஆ) நடைபாதைபுறம்

இ) ஓட்டுனர் புறம்

ஈ) பின்புறம்

26. பள்ளி பேருந்தின் நிறம் என்ன?

அ) சிவப்பு

ஆ) நீலம்

இ) மஞ்சள்

ஈ) பச்சை

27. இருசக்கர மோட்டார் வாகனத்தில் எத்தனை பேர் பயணிக்க வேண்டும்?

அ) 2

ஆ) 4

இ) 1

ஈ) 3

28. இந்த குறியீடு எதை குறிக்கும்

அ) வரிகோடு

ஆ) தனிக்கோடு

இ) நேர்கோடு

ஈ) வளைவுகோடு



29. இந்த குறியீடு எதை குறிக்கும்

அ) வரிகோடு

ஆ) பள்ளப்பகுதி

இ) வளைவு பாதை

ஈ) வேகதடை



30. இந்த குறியீடு எதை குறிக்கும்

அ) தவறான பாதை

ஆ) இரும்பு பாதை

இ) “U” வளைவு

ஈ) வேகதடை



APPENDIX - 8

CONTENT FOR VIDEO ASSISTED TEACHING –ENGLISH

Lesson plan on Road safety measures

Name of the student teacher	:	Mr. W. Hudson Samuel
Class	:	CSI Middle school students in Big Kanchipuram
No of Students	:	120
Date of taken	:	
Duration	:	13 minutes.
Topic	:	Road safety Measures
Method of Teaching	:	Lecture method, A-V AIDS: Video Teaching Method.

GENERAL OBJECTIVES

The student will be able to Gain adequate knowledge regarding road safety measures.

SPECIFIC OBJECTIVE

At the end of the session the student will be able to understand the Road safety Measures.

- Introduction
- Define road traffic accident?
- List out the causes of road traffic accident?
- Enumerate pedestrian crossings:
- List out the instruction Walking along the road
- List out the instruction to cross the road for children:
- Mention Cycle safety for children
- Explain Bus safety
- Enumerate The rules of the road
- Enumerate rules regulation and techniques for road safety measures:
- List out about Signals:
- List out about traffic sign's;
- Explain the prevention of RTA among children
- Explain the road safety tips for children

ROAD SAFETY MEASURE

INTRODUCTION

The term accident has been defined as an occurrence in the sequence of events which usually produces unintended injury, death or property damage.

DEFINITION

Road safety refers to methods and measures that are issued to reduce the risks of injury, death and harm to drivers, passengers and pedestrians.

INCIDENT

- ❖ India no.1 in Road Accidents.
- ❖ India suffers from highest number of deaths around 150000 in absolute terms annually
- ❖ INDIA: 2012
- ❖ Accidents : 4.97 lakh (1 every minute)
- ❖ Deaths: 1,42,485 (one death every 4 min)
- ❖ Road traffic injuries(RTIs) was 9th leading cause of death in 2004 and expected to be 5th leading cause of death by 2030.

CAUSES OF ROAD SAFETY ACCIDENTS:

- ❖ Over Speeding
- ❖ Drunk Driving
- ❖ Using Mobile Phones while Driving
- ❖ Ignoring Safety Precautions
- ❖ Not wearing of helmets and seatbelts
- ❖ Animal Roaming on Roads
- ❖ Seat Belt Wearing
- ❖ Careless Driving
- ❖ Inexperience
- ❖ Failed to Look Properly
- ❖ Loss of Control.

INSTRUCTION FOR PEDESTRIAN CROSSINGS:

- ❖ Stop, Look and, Listen before they cross any road
- ❖ explain the pedestrians have to wait on the pavement until all the traffic coming from both directions has stopped - only then is it safe to cross
- ❖ explain if there is an island in the middle of the road, the child should treat each half of the crossing as a separate crossing
- ❖ always use a zebra or light-controlled crossing, or a school crossing patrol if there is one

INSTRUCTION FOR WALKING ALONG THE ROAD

- Always walk on the pavement or path if there is one - never stay on to the road
- Walk as far away from the kerb as possible
- Where there is no pavement, walk in single file on the right side of the road facing the traffic

INSTRUCTION TO CROSS THE ROAD FOR CHILDREN

- ❖ Always set a good example by choosing a safe place to cross and explaining what they are doing
- ❖ Let the child decide where and when it's safe to cross.
- ❖ Tell the child that it's safest to cross at a pedestrian crossing or a crossing patrol.
- ❖ Explain that they should not try to cross a road between parked cars.
- ❖ drivers won't be able to see them very well and the cars might start moving When it's safe to cross, walk straight across the road and keep looking and listening out for traffic

INSTRUCTION FOR CYCLE SAFETY FOR CHILDREN

Cycling is a fun and healthy way for the child to get around, but there are dangers to be aware of. By setting a good example and making sure the child is trained and has the right clothing and equipment, we can help keep them safe.

- ❖ Wear a cycle helmet
- ❖ Obey traffic signs, be considerate of other road users and not let yourself be distracted by using a mobile phone or listening to music
- ❖ Encourage them to take their own decisions - they shouldn't blindly follow what others are doing without making their own checks first
- ❖ Practice judging speed and distance with them
- ❖ Help them work out the safest routes for the journeys they make.

INSTRUCTION FOR BUS SAFETY

The main ways to stay safe when travelling by bus or coach are as follows:.

- ❖ At the bus stop, always follow the queue.
- ❖ Never board or alight at a red light crossing or unauthorized bus stop.
- ❖ Do not sit, stand or travel on the footboard of the bus.
- ❖ Do not put any part of your body outside a moving or a stationary bus.
- ❖ While in the bus, refrain from shouting or making noise as it can distract the driver.
- ❖ Always adheres to the bus safety rules.
- ❖ Wear helmet while riding it will prevent head injury.

- ❖ Wear seat belt while driving.
- ❖ Avoid hearing music while driving.
- ❖ Follow the slogan like Stop, Look and, Listen before they cross any road.
- ❖ School Buses should be painted with Bright Yellow color.
- ❖ For walking always use left side of road.

THE RULES OF THE ROAD

When the child is out and about, we should encourage them to follow the basic rules of the road:

- ❖ look behind before they turn, overtake or stop
- ❖ use arm signals before they turn
- ❖ obey traffic lights and road signs
- ❖ do not ride on the pavement unless there is a sign saying they can
- ❖ do not cycle next to another person on a narrow road
- ❖ Watch out for car doors opening suddenly when passing parked cars.

RULES REGULATION AND TECHNIQUES FOR ROAD SAFETY MEASURES

- ❖ Lines and lane marking on the road.
- ❖ Reflective road studs may be used with white lines signs.
- ❖ Traffic light signs
- ❖ Traffic signs

- ❖ Flashing headlights
- ❖ The horn
- ❖ Lines and lane marking on the road.

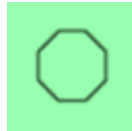
SIGNALS

- ❖ Give clear signals in plenty of time, having checked it is not misleading to signal at that time
- ❖ use them to advise other road users before changing course or direction, stopping or moving off
- ❖ cancel them after use
- ❖ use an arm signal to emphasize or reinforce your signal if necessary.
Remember that signaling does not give you priority.
- ❖ watch out for signals given by other road users and proceed only when you are satisfied that it is safe
- ❖ be aware that an indicator on another vehicle may not have been cancelled.
- ❖ Red indicate stop
- ❖ Yellow indicate wait and watch
- ❖ Green indicate go.

TRAFFIC SIGN'S

Regulatory sign's:

Regulatory signs come in four different shapes and colour combinations as follows:



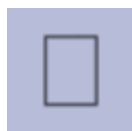
It indicate The octagon (eight sides) is used only for a STOP sign and has a red background with white letters.



It indicate The equal sided triangle (with one point downwards) is used only for a GIVE WAY sign and has a red and white background with black letters.



It indicate The circle is used for pedestrian safety, hand-held STOP banners and on railway crossing gates. When used for pedestrian safety it has a yellow background with a black symbol. All other times it has a red background and white letters.



It indicates The long vertical rectangle is used for other regulatory signs that don't have their own special shape. These signs have a white background with black letters or symbols.



It indicate, The pedestrian crossing which are in black and white colour, it is help to cross the road.



It indicate The school zone it shows where the school is to prevent accident .



It indicate The speed breaker , to reduce the speed of the vehicle .



It indicates The no horn zone to be calm .

SPEED LIMITS

You **MUST NOT** exceed the maximum speed limits for the road and for your vehicle. The presence of street lights generally means that there is a 30 mph (50 km/h) speed limit unless otherwise specified.

- ❖ Sharing the road with pedestrians, cyclists and horse riders, particularly children, and motorcyclists
- ❖ Weather conditions make it safer to do so
- ❖ Driving at night as it is more difficult to see other road users.

FLASHING HEADLIGHTS:

Only flash your headlights to let other road users know that you are there. Do not flash your headlights to convey any other message or intimidate other road users.

Never assume that flashing headlights is a signal inviting you to proceed. Use your own judgment and proceed carefully.

The horn. Use only while your vehicle is moving and you need to warn other road users of your presence. Never sound your horn aggressively. You **MUST NOT** use your horn while stationary on the road.

PREVENTION OF RTA AMONG CHILDREN

- ❖ Wear a cycle helmet yourself.
- ❖ Obey traffic signs, be considerate of other road users and not let yourself be distracted by using a mobile phone or listening to music
- ❖ Encourage them to notice and discuss what they see around them on the road
- ❖ practice judging speed and distance with them
- ❖ Wear helmet while riding it will prevent head injury.
- ❖ Wear seat belt while driving.
- ❖ Avoid hearing music while driving.
- ❖ Follow the slogan like Stop, Look and, Listen before they cross any road.
- ❖ School Buses should be painted with Bright Yellow color. For walking always use left side of road

ROAD SAFETY TIPS FOR CHILDREN

- ❖ Do not give cycles and two wheelers to the children until they are mentally mature enough.
- ❖ Ensure that children use Helmet while using Two Wheelers.
- ❖ Back seat riders also should use Helmet
- ❖ Never drink and drive. Somebody is waiting for you at home.
- ❖ Never use mobile phones while driving, riding.
- ❖ Avoid long trips during night, as far as possible. Insist that your child uses bright colored dresses, if the child is going for an early morning walk or cycling or walking on a road during night or if the Lighting is poor due to mist or some other reason.
- ❖ If you are driving at night, get refreshed at regular intervals by having a face Wash or by having a cup of Coffee or Tea. Some of the

co-passengers Should ensure that you are awake. Restrict speed at known accident prone areas.

- ❖ Check up your vehicle regularly and especially before long journey.
- ❖ Teach the children to look behind before making any lateral movement while walking on the road. Let them make it a habit so that they will do it automatically before making any lateral movement
- ❖ When you are walking with small children on road side, hold on their hand. It should not be the other way ie. Don't let the children to hold on your hand.
- ❖ While walking with children on road side, keep the children on the outer side of the road. You should be in the inner side.
- ❖ School Buses should be painted with Bright Yellow color.

சாலைபாதுகாப்பு விதிமுறைகள்

ஆய்வாளரின் பெயர்	:	திரு.ஹட்சன் சாமுவேல்
படிக்கும் வகுப்பு	:	(செவிலியர் பயிற்சி)
		முதுநிலை கல்வி இரண்டாம் ஆண்டு
கலந்துரையாளர்களின் விபரம்	:	சி.எஸ்.ஐ இடைநிலை பள்ளி மாணவர்கள், காஞ்சிபுரம்.
தலைப்பு	:	சாலை பாதுகாப்பு விதிமுறைகள்
வகுப்பு நடக்கும் இடம்	:	சி.எஸ்.இ இடைநிலை பள்ளி வளாகம்.
வீடியோ பாடம் எடுக்கும் நேரம்	:	13 நிமிடங்கள்
பாடம் எடுக்கும் முறை	:	வீடியோ பாட தொகுப்பு முறை

பொதுவான குறிக்கோள்

வீடியோ பாடமுறைக்குப் பிறகு மாணவர்கள் சாலைபாதுகாப்பு விதிமுறைகளை பற்றி தெளிவான அறிவை பெறுதல்.

தனிப்பட்ட குறிக்கோள்

வீடியோ பாடமுறைக்குப் பிறகு அனைத்து மாணவ மற்றும் மாணவிகளும் சாலை பாதுகாப்பு விதிமுறைகளை பற்றி அறிய

1. சாலை பாதுகாப்பு விதிகள் வரையறை
2. சாலை விபத்து என்றால் என்ன?
3. சாலையில் விபத்துகள் ஏற்பட காரணங்கள்
4. சாலையில் நடத்து செல்லும் பொழுது கடைபிடிக்க வேண்டிய விதிமுறைகள்
5. சாலையை கடந்து செல்லும் பொழுது கடைபிடிக்க வேண்டிய விதிமுறைகள்
6. மிதிவண்டியை ஓட்டும்பொழுது கடைபிடிக்க வேண்டிய விதிமுறைகள்
7. இருசக்கர வாகனத்தில் கடைபிடிக்க வேண்டிய விதிமுறைகள்
8. நான்கு சக்கர வாகனங்களில் பயணிக்கும் பொழுது கவனிக்க வேண்டிய விதிமுறைகள்
9. நெடுஞ்சாலை குறிகளும் அதன் பயன்களும்

சாலைபாதுகாப்பு விதிமுறைகள்

சாலை பாதுகாப்பு விதிகள் வரையறை

நம் இந்தியாவில் நான்கு இலட்சத்து 97 ஆயிரம் சாலை விபத்துகள் ஒரு நிமிடத்தில் நடைபெறுகின்றன. அதில் ஒரு இலட்சத்து 42 ஆயிரம் உயிரிழப்பு ஏற்படுகின்றது. சாலை விபத்துக்களில் இந்தியா ஒன்பதாவது இடத்தை பிடித்திருக்கிறது. இதில் 32 சதவிகிதம் பள்ளி குழந்தைகளே.

சாலை விபத்து

சாலை விபத்து என்பது சாலையில் ஏற்படும் எதிர்பாராத நிகழ்வு ஆகும்.

சாலையில் விபத்துக்கள் ஏற்பட காரணங்கள்

1. வாகனங்களை அதிக வேகத்தில் ஓட்டுதல்
2. மது அருந்திவிட்டு வாகனம் ஓட்டுதல்
3. கைபேசி பேசிக்கொண்டு வாகனங்களை ஓட்டுதல்
4. சாலைவிதிகளை மதிக்காமல் வாகனம் ஓட்டுதல்
5. தலைகவசம் அணியாமல் இருசக்கர வாகனம் ஓட்டுதல்
6. விலங்குகள் சாலையில் நடமாடுதல்
7. சீட்பெல்ட் அணியாமல் வாகனம் ஓட்டுதல்
8. பழக்கமின்றி வாகனங்கள் ஓட்டுதல்
9. விளையாட்டுதனமாக வாகனங்கள் ஓட்டுதல்

சாலையில் நடந்து செல்லும் பொழுது கடைபிடிக்க வேண்டிய விதிமுறைகள் :

- சாலையில் நடந்துசெல்லும் பொழுது சாலை பாதுகாப்பு விதிகளை நம் நினைவில் கொள்ள வேண்டும்.
- சாலையில் நடந்துசெல்லும் பொழுது சாலை ஓரமாக உள்ள நடைபாதையில் நடந்து செல்ல வேண்டும். நடைபாதை இல்லை என்றால் ஒற்றையாக சாலை ஓரங்களில் இடதுபுறமாக நடந்து செல்ல வேண்டும்.
- சாலையின் நடுவில் கைகளை கோர்த்துக் கொண்டு நடந்து செல்லக்கூடாது.

சாலையை கடந்து செல்லும் பொழுது கடைபிடிக்க வேண்டிய விதிமுறைகள்

- நில், கவனி, செல் என்ற மந்திரத்தை நினைவில் கொள்ள வேண்டும்.
- சாலையை கடந்து செல்லும் பொழுது வரிக்கோடு மற்றும் போக்குவரத்து சிக்னல்கள் மூலம் கடக்க வேண்டும்.
- சாலையை கடந்து செல்லும் பொழுது பெற்றோர்களின் கையை பிடித்து கவனமாக கடக்க வேண்டும்.
- சாலையை தனியாக கடக்கும் பொழுது வலதுபுறம் பார்த்து பிறகு இடதுபுறம் பார்த்துவிட்டு, பின்பும் வலதுபுறம் பார்த்து வாகனங்கள் ஏதும் வரவில்லை என்றால் சாலையை கடக்க வேண்டும்.
- கைபேசி பேசிக்கொண்டே சாலையை கடத்தல் கூடாது.
- நான்குவழி சாலையாக இருந்தால் சாலையை இரண்டாக பிரித்து முதல் பாகத்தை கடந்த பிறகு இரண்டாம் பாகத்தை கடக்க வேண்டும்.

மிதிவண்டியை ஓட்டும் பொழுது கடைபிடிக்க வேண்டிய விதிமுறைகள்

1. மிதிவண்டியை ஓட்டும்பொழுது மிதிவண்டி தலைகவசம் அணிந்துகொள்ள வேண்டும்.
2. மிதிவண்டியின் சக்கரம், விளக்கு, பிரேக் ஆகியவற்றை சரிபார்த்த பிறகு ஓட்டுதல் வேண்டும்.
3. நான்கு சக்கர வானங்களுக்கு நடுவில் மிதிவண்டியை ஓட்டுதல் கூடாது.
4. மிதிவண்டியை ஓட்டும்பொழுது ஒரே சீராக ஓட்டுதல் வேண்டும்.
5. மிதிவண்டியை சாலையின் ஓரத்தில் ஓட்டுதல் வேண்டும்.
6. மிதிவண்டியை சாலையில் ஓட்டும்பொழுது வாகனங்களை முந்திக்கொண்டு ஓட்டுதல் கூடாது.
7. மிதிவண்டியை இடதுபுறமாக திரும்பும்பொழுது இடதுகை காட்ட வேண்டும். மிதிவண்டியை வலதுபுறம் திரும்பும் பொழுது வலதுகை காட்ட வேண்டும்.
8. மிதிவண்டி நேராக செல்ல வேண்டும் என்றால் கையை மேல் தூக்கி காட்ட வேண்டும்.
9. மிதிவண்டியை நிறுத்த வேண்டும் என்றால் கையை கீழ் நோக்கி காட்ட வேண்டும்.

இருசக்கர வாகனத்தில் கடைபிடிக்க வேண்டிய விதிமுறைகள்

- ❖ இருசக்கர வாகனம் ஓட்டும்பொழுது தலைகவசம் அணிய வேண்டும்.
- ❖ பெற்றோருடன் இருசக்கர வாகனத்தில் செல்லும் பொழுது பெற்றோரை இறுக்கமாக கட்டி அனைத்து உட்கார்ந்து கொள்ள வேண்டும்.
- ❖ சிவப்பு விளக்கு எரிந்தால் வாகனங்களை நிறுத்த வேண்டும்.
- ❖ மஞ்சள் விளக்கு எரிந்தால் வாகனங்கள் புறப்படுவதற்கு தயாராக வேண்டும்.
- ❖ பச்சை விளக்கு எரிந்தால் வாகனங்கள் புறப்பட வேண்டும்.

நான்கு சக்கர வாகனங்களில் பயணிக்கும்பொழுது கவனிக்க வேண்டிய விதிமுறைகள்

- ✓ வாகனத்தில் ஏறும்பொழுது நடைபாதை வழியாக ஏற வேண்டும்.
- ✓ நான்கு சக்கர வாகனத்தில் செல்லும் பொழுது சீட் பெல்ட் அணிந்து கொள்ள வேண்டும்.
- ✓ கைபேசி உபயோகித்துக் கொண்டு வாகனத்தை ஓட்டுதல் கூடாது.
- ✓ மதுபானங்களை அருந்திக்கொண்டு வாகனங்கள் ஓட்ட கூடாது.
- ✓ மழைக்காலங்களில் கவனமாக வாகனங்களை ஓட்ட வேண்டும்.
- ✓ பேருந்தில் ஏறும்போதும் இறங்கும் பொழுதும் வரிசையாக செல்ல வேண்டும்.
- ✓ பேருந்து நின்றபின் ஏற வேண்டும், பேருந்து நின்ற பின் இறங்க வேண்டும்.
- ✓ பேருந்தில் பயணிக்கும் பொழுது இருக்கையில் அமர்ந்துகொண்டு பயணிக்க வேண்டும். பேருந்து படிக்கட்டில் உட்கார்ந்து கொண்டோ, நின்று கொண்டோ பயணித்தல் கூடாது.
- ✓ பேருந்தில் இருந்து கை, தலை, வெளியே நீட்டக்கூடாது.
- ✓ பேருந்தில் இருந்து இறங்கியபின் சாலையை கடக்க வேண்டும் என்றால் பேருந்து சென்றபின் சாலையை கடக்க வேண்டும். பேருந்தின் முன்புறமோ, பின்புறமோ சாலையை கடத்தல் கூடாது.
- ✓ பள்ளி பேருந்தில் பயணம் செய்யும் பொழுது பேருந்தில் உள்ளே விளையாடுதல் கூடாது.

நெடுஞ்சாலை குறிகளும் அதன் பயன்களும்



1. இந்த குறியின் பெயர் வரிக்கோடு, இது கறுப்பு வெள்ளை கோடுகளால் ஆனது. இது சாலையை கடக்க பயன்படுகிறது.



2. இந்த குறியீடு பள்ளி பகுதியை குறிக்கும்.



3. இந்த குறியீடு யூ வளைவு கூடாது என்பதை குறிக்கும்.



4. இது நிறுத்தல் குறி.



5. இந்த குறி வேத்தடை உள்ளது என்பதை குறிக்கும்.

பொதுவான சாலை பாதுகாப்பு விதிமுறைகள்

1. ஓட்டுனர் அடையாள அட்டை உள்ளவர்கள் மட்டும் வாகனங்களை ஓட்ட வேண்டும்.
2. நான்கு சக்கர வாகனங்களில் தொங்கிக்கொண்டு பயணம் செய்தல் கூடாது.
3. இருசக்கர வாகனத்தில் இரண்டிற்கு மேற்பட்டவர்கள் பயணம் செய்வதை தவிர்க்க வேண்டும்.
4. பள்ளி பகுதியில் வேகத்தை உண்டென்றால் வாகனத்தில் வேகத்தை குறைத்து விட்டு வேகத்தடையை தாண்டிவிட்டு வாகனத்தின் வேகத்தை அதிகப்படுத்த வேண்டும்.
5. கைபேசியில் தகவல் அனுப்பிக்கொண்டே வாகனத்தை ஓட்ட கூடாது.
6. நான்கு சக்கர வாகனத்தின் சரியான வேகம் 50 கிலோ மீட்டர்.
7. சாலையில் ஏதேனும் வளைவு உள்ளது என்றால் ஒலி எழுப்பிவிட்டு வளையவும்.
8. சாலையோரங்களில் நடக்கும்பொழுது இடதுபுறமாக நடக்க வேண்டும்.
9. இரவு நேரங்களில் தொலைதூர பயணத்தை தவிர்க்க வேண்டும்.
10. குழந்தைகள் பெற்றோருடன் சாலையில் நடந்து செல்லும் பொழுது பெற்றோர் சாலையின் ஓரமாகவும், குழந்தைகள் சாலையின் வெளிப்புறமாகவும் நடந்து செல்ல வேண்டும்.
11. சாலையோர வளைவுகளில் வாகனங்களை நிறுத்துதல் கூடாது.
12. சாலைவிபத்து ஏற்பட்டால் உடனுக்குடன் அழைக்க வேண்டிய தொலைபேசி எண் 108.

முடிவுரை

சாலைபாதுகாப்பு விதிகளை பயன்படுத்துவதன் மூலம் ஏராளமான சாலை விபத்துகளிலிருந்து நம்மை நாம் காப்பாற்றிக்கொள்ளலாம். “சாலை பாதுகாப்பு விதிகளை மதிப்பீர் - உயிரை காப்பீர்”

ANSWERS FOR KNOWLEDGE QUESTIONNAIRES

1	B
2	A
3	A
4	B
5	A
6	B
7	B
8	A
9	C
10	A
11	A
12	B
13	C
14	C
15	A
16	A
17	A
18	B
19	C
20	C
21	B
22	D
23	C
24	C
25	B
26	C
27	A
28	A
29	B
30	D